Assigned Numbers

Bluetooth® Document

- **Version Date:** 2023-12-11

Abstract:

This is a regularly updated document listing assigned numbers, codes, and identifiers in the Bluetooth specifications.

Contents

1   Introduction

This is a regularly updated document listing assigned numbers, codes, and identifiers in the Bluetooth specifications. This document is referenced by the Bluetooth Core Specification, Volume 1, Part E, Section 2.6 [4], and other profile and service specifications.

Any value defined in this document is reserved for that use by the Bluetooth SIG within the scope of a Bluetooth specification.

Any values not defined in this document for a given assigned numbers type are Reserved for Future Use (RFU) and shall be handled as specified in the Bluetooth Core Specification, Volume 1, Part E, Section 2.4 [4].

2 Core Specification

The following section includes the assigned numbers defined by the Core Specification [4]. The subsections are organized by volume and part within the Core Specification.

2.1 Core specification versions

Referenced from the following:

- Bluetooth Core Specification [Vol 2] Part C, Section 5.2 [4].
- Bluetooth Core Specification [Vol 4] Part E, Section 7.4.1 [4].
- Bluetooth Core Specification [Vol 4] Part E, Section 7.7.12 [4].
- Bluetooth Core Specification [Vol 6] Part B, Section 2.4.2.13 [4].

Last Modified: 2023-08-08

Filename: assigned_numbers/core/core_version.yaml

Core Specification Name	Version
Bluetooth® Core Specification 1.0b (Withdrawn)	0x00
Bluetooth® Core Specification 1.1 (Withdrawn)	0x01
Bluetooth® Core Specification 1.2 (Withdrawn)	0x02
Bluetooth® Core Specification 2.0+EDR (Withdrawn)	0x03
Bluetooth® Core Specification 2.1+EDR (Withdrawn)	0x04
Bluetooth® Core Specification 3.0+HS (Withdrawn)	0x05
Bluetooth® Core Specification 4.0 (Withdrawn)	0x06
Bluetooth® Core Specification 4.1 (Deprecated)	0x07
Bluetooth® Core Specification 4.2	0x08
Bluetooth® Core Specification 5.0	0x09
Bluetooth® Core Specification 5.1	0x0A
Bluetooth® Core Specification 5.2	0x0B
Bluetooth® Core Specification 5.3	0x0C
Bluetooth® Core Specification 5.4	0x0D

2.2 Special LAPs

Referenced from the following:

- Bluetooth Core Specification [Vol 1] Part B, Section 1 [4].
- Bluetooth Core Specification [Vol 2] Part B, Section 1.2.1 [4].
- Bluetooth Core Specification [Vol 4] Part E, Section 7.1.1 [4].
- Bluetooth Core Specification [Vol 4] Part E, Section 7.1.3 [4].
- Bluetooth Core Specification [Vol 4] Part E, Section 7.7.74 [4].

Last Modified: 2023-02-02

Filename: assigned_numbers/core/diacs.yaml

Name	Value
Limited Inquiry Access Code (LIAC)	0x9E8B00
General Inquiry Access Code (GIAC)	0x9E8B33

2.3 Common Data Types

Referenced from the following:

• Supplement to the Bluetooth Core Specification Part A, Section 1 [22].
• Bluetooth Core Specification [Vol 3] Part C, Section 8 [4].
• Bluetooth Core Specification [Vol 3] Part C, Section 11 [4].
• Bluetooth Core Specification [Vol 6] Part B, Section 2.3.4.8 [4].

Last Modified: 2023-08-08

Filename: assigned_numbers/core/ad_types.yaml

Common Data Type	Name	Reference
0x01	Flags	Core Specification Supplement, Part A, Section 1.3
0x02	Incomplete List of 16-bit Service Class UUIDs	Core Specification Supplement, Part A, Section 1.1
0x03	Complete List of 16-bit Service Class UUIDs	Core Specification Supplement, Part A, Section 1.1
0x04	Incomplete List of 32-bit Service Class UUIDs	Core Specification Supplement, Part A, Section 1.1
0x05	Complete List of 32-bit Service Class UUIDs	Core Specification Supplement, Part A, Section 1.1
0x06	Incomplete List of 128-bit Service Class UUIDs	Core Specification Supplement, Part A, Section 1.1
0x07	Complete List of 128-bit Service Class UUIDs	Core Specification Supplement, Part A, Section 1.1
0x08	Shortened Local Name	Core Specification Supplement, Part A, Section 1.2
0x09	Complete Local Name	Core Specification Supplement, Part A, Section 1.2
0x0A	Tx Power Level	Core Specification Supplement, Part A, Section 1.5
0x0D	Class of Device	Core Specification Supplement, Part A, Section 1.6
0x0E	Simple Pairing Hash C-192	Core Specification Supplement, Part A, Section 1.6
0x0F	Simple Pairing Randomizer R-192	Core Specification Supplement, Part A, Section 1.6
0x10	Device ID	Device ID Profile
0x10	Security Manager TK Value	Core Specification Supplement, Part A, Section 1.8
0x11	Security Manager Out of Band Flags	Core Specification Supplement, Part A, Section 1.7

0x12	Peripheral Connection Interval Range	Core Specification Supplement, Part A, Section 1.9
0x14	List of 16-bit Service Solicitation UUIDs	Core Specification Supplement, Part A, Section 1.10
0x15	List of 128-bit Service Solicitation UUIDs	Core Specification Supplement, Part A, Section 1.10
0x16	Service Data - 16-bit UUID	Core Specification Supplement, Part A, Section 1.11
0x17	Public Target Address	Core Specification Supplement, Part A, Section 1.13
0x18	Random Target Address	Core Specification Supplement, Part A, Section 1.14
0x19	Appearance	Core Specification Supplement, Part A, Section 1.12
0x1A	Advertising Interval	Core Specification Supplement, Part A, Section 1.15
0x1B	LE Bluetooth Device Address	Core Specification Supplement, Part A, Section 1.16
0x1C	LE Role	Core Specification Supplement, Part A, Section 1.17
0x1D	Simple Pairing Hash C-256	Core Specification Supplement, Part A, Section 1.6
0x1E	Simple Pairing Randomizer R-256	Core Specification Supplement, Part A, Section 1.6
0x1F	List of 32-bit Service Solicitation UUIDs	Core Specification Supplement, Part A, Section 1.10
0x20	Service Data - 32-bit UUID	Core Specification Supplement, Part A, Section 1.11
0x21	Service Data - 128-bit UUID	Core Specification Supplement, Part A, Section 1.11
0x22	LE Secure Connections Confirmation Value	Core Specification Supplement, Part A, Section 1.6
0x23	LE Secure Connections Random Value	Core Specification Supplement, Part A, Section 1.6
0x24	URI	Core Specification Supplement, Part A, Section 1.18
0x25	Indoor Positioning	Indoor Positioning Service
0x26	Transport Discovery Data	Transport Discovery Service
0x27	LE Supported Features	Core Specification Supplement, Part A, Section 1.19
0x28	Channel Map Update Indication	Core Specification Supplement, Part A, Section 1.20

0x29	PB-ADV	Mesh Profile Specification, Section 5.2.1
0x2A	Mesh Message	Mesh Profile Specification, Section 3.3.1
0x2B	Mesh Beacon	Mesh Profile Specification, Section 3.9
0x2C	BIGInfo	Core Specification Supplement, Part A, Section 1.21
0x2D	Broadcast_Code	Core Specification Supplement, Part A, Section 1.22
0x2E	Resolvable Set Identifier	Coordinated Set Identification Profile v1.0 or later
0x2F	Advertising Interval - long	Core Specification Supplement, Part A, Section 1.15
0x30	Broadcast_Name	Public Broadcast Profile v1.0 or later
0x31	Encrypted Advertising Data	Core Specification Supplement, Part A, Section 1.23
0x32	Periodic Advertising Response Timing Information	Core Specification Supplement, Part A, Section 1.24
0x34	Electronic Shelf Label	ESL Profile
0x3D	3D Information Data	3D Synchronization Profile
0xFF	Manufacturer Specific Data	Core Specification Supplement, Part A, Section 1.4

2.4   Characteristic Presentation Format

See Bluetooth Core Specification [Vol 3] Part G, Section 3.3.3.5 [4].

2.4.1   GATT Format Types

Referenced from Bluetooth Core Specification [Vol 3] Part G, Section 3.3.3.5.2 [4].

Last Modified: 2023-08-08

Filename: assigned_numbers/core/formattypes.yaml

Value	Type Name	Description
0x01	boolean	unsigned 1-bit; 0 = false; 1 = true
0x02	uint2	unsigned 2-bit integer
0x03	uint4	unsigned 4-bit integer
0x04	uint8	unsigned 8-bit integer
0x05	uint12	unsigned 12-bit integer
0x06	uint16	unsigned 16-bit integer
0x07	uint24	unsigned 24-bit integer
0x08	uint32	unsigned 32-bit integer
0x09	uint48	unsigned 48-bit integer
0x0A	uint64	unsigned 64-bit integer
0x0B	uint128	unsigned 128-bit integer
0x0C	sint8	signed 8-bit integer
0x0D	sint12	signed 12-bit integer
0x0E	sint16	signed 16-bit integer
0x0F	sint24	signed 24-bit integer
0x10	sint32	signed 32-bit integer
0x11	sint48	signed 48-bit integer
0x12	sint64	signed 64-bit integer
0x13	sint128	signed 128-bit integer
0x14	float32	IEEE-754 32-bit floating point
0x15	float64	IEEE-754 64-bit floating point
0x16	medfloat16	IEEE 11073-20601 16-bit SFLOAT
0x17	medfloat32	IEEE 11073-20601 32-bit FLOAT
0x18	uint16[2]	IEEE 11073-20601 nomenclature code
0x19	utf8s	UTF-8 string
0x1A	utf16s	UTF-16 string
0x1B	struct	opaque structure

0x1C	medASN1	IEEE-11073 ASN.1/MDER structure

2.4.2 GATT Characteristic Presentation Format Name Space

Referenced from Bluetooth Core Specification [Vol 3] Part G, Section 3.3.3.5.5 [4].

Last Modified: 2023-02-02

Filename: assigned_numbers/core/namespaces.yaml

Value	Name	Reference
0x01	Bluetooth SIG	Section 2.4.2.1

2.4.2.1   Bluetooth SIG GATT Characteristic Presentation Format Description

Referenced from Bluetooth Core Specification [Vol 3] Part G, Section 3.3.3.5.6 [4].

Last Modified: 2023-02-02

Filename: assigned_numbers/core/namespace.yaml

Value	Name
0x0000	unknown
0x0001	first
0x0002	second
0x0003	third
0x0004	fourth
0x0005	fifth
0x0006	sixth
0x0007	seventh
0x0008	eighth
0x0009	ninth
0x000A	tenth
0x000B	eleventh
0x000C	twelfth
0x000D	thirteenth
0x000E	fourteenth
0x000F	fifteenth
0x0010	sixteenth
0x0011	seventeenth
0x0012	eighteenth
0x0013	nineteenth
0x0014	twentieth
0x0015	twenty-first
0x0016	twenty-second
0x0017	twenty-third
0x0018	twenty-fourth
0x0019	twenty-fifth
0x001A	twenty-sixth
0x001B	twenty-seventh
0x001C	twenty-eighth
0x001D	twenty-ninth

0x001E	thirtieth
0x001F	thirty-first
0x0020	thirty-second
0x0021	thirty-third
0x0022	thirty-fourth
0x0023	thirty-fifth
0x0024	thirty-sixth
0x0025	thirty-seventh
0x0026	thirty-eighth
0x0027	thirty-ninth
0x0028	fortieth
0x0029	forty-first
0x002A	forty-second
0x002B	forty-third
0x002C	forty-fourth
0x002D	forty-fifth
0x002E	forty-sixth
0x002F	forty-seventh
0x0030	forty-eighth
0x0031	forty-ninth
0x0032	fiftieth
0x0033	fifty-first
0x0034	fifty-second
0x0035	fifty-third
0x0036	fifty-fourth
0x0037	fifty-fifth
0x0038	fifty-sixth
0x0039	fifty-seventh
0x003A	fifty-eighth
0x003B	fifty-ninth
0x003C	sixtieth
0x003D	sixty-first
0x003E	sixty-second
0x003F	sixty-third
0x0040	sixty-fourth
0x0041	sixty-fifth

0x0042	sixty-sixth
0x0043	sixty-seventh
0x0044	sixty-eighth
0x0045	sixty-ninth
0x0046	seventieth
0x0047	seventy-first
0x0048	seventy-second
0x0049	seventy-third
0x004A	seventy-fourth
0x004B	seventy-fifth
0x004C	seventy-sixth
0x004D	seventy-seventh
0x004E	seventy-eighth
0x004F	seventy-ninth
0x0050	eightieth
0x0051	eighty-first
0x0052	eighty-second
0x0053	eighty-third
0x0054	eighty-fourth
0x0055	eighty-fifth
0x0056	eighty-sixth
0x0057	eighty-seventh
0x0058	eighty-eighth
0x0059	eighty-ninth
0x005A	ninetieth
0x005B	ninety-first
0x005C	ninety-second
0x005D	ninety-third
0x005E	ninety-fourth
0x005F	ninety-fifth
0x0060	ninety-sixth
0x0061	ninety-seventh
0x0062	ninety-eighth
0x0063	ninety-ninth
0x0064	one-hundredth
0x0065	one-hundred-and-first

0x0066	one-hundred-and-second
0x0067	one-hundred-and-third
0x0068	one-hundred-and-fourth
0x0069	one-hundred-and-fifth
0x006A	one-hundred-and-sixth
0x006B	one-hundred-and-seventh
0x006C	one-hundred-and-eighth
0x006D	one-hundred-and-ninth
0x006E	one-hundred-and-tenth
0x006F	one-hundred-and-eleventh
0x0070	one-hundred-and-twelfth
0x0071	one-hundred-and-thirteenth
0x0072	one-hundred-and-fourteenth
0x0073	one-hundred-and-fifteenth
0x0074	one-hundred-and-sixteenth
0x0075	one-hundred-and-seventeenth
0x0076	one-hundred-and-eighteenth
0x0077	one-hundred-and-nineteenth
0x0078	one-hundred-twentieth
0x0079	one-hundred-and-twenty-first
0x007A	one-hundred-and-twenty-second
0x007B	one-hundred-and-twenty-third
0x007C	one-hundred-and-twenty-fourth
0x007D	one-hundred-and-twenty-fifth
0x007E	one-hundred-and-twenty-sixth
0x007F	one-hundred-and-twenty-seventh
0x0080	one-hundred-and-twenty-eighth
0x0081	one-hundred-and-twenty-ninth
0x0082	one-hundred-thirtieth
0x0083	one-hundred-and-thirty-first
0x0084	one-hundred-and-thirty-second
0x0085	one-hundred-and-thirty-third
0x0086	one-hundred-and-thirty-fourth
0x0087	one-hundred-and-thirty-fifth
0x0088	one-hundred-and-thirty-sixth
0x0089	one-hundred-and-thirty-seventh

0x008A	one-hundred-and-thirty-eighth
0x008B	one-hundred-and-thirty-ninth
0x008C	one-hundred-fortieth
0x008D	one-hundred-and-forty-first
0x008E	one-hundred-and-forty-second
0x008F	one-hundred-and-forty-third
0x0090	one-hundred-and-forty-fourth
0x0091	one-hundred-and-forty-fifth
0x0092	one-hundred-and-forty-sixth
0x0093	one-hundred-and-forty-seventh
0x0094	one-hundred-and-forty-eighth
0x0095	one-hundred-and-forty-ninth
0x0096	one-hundred-fiftieth
0x0097	one-hundred-and-fifty-first
0x0098	one-hundred-and-fifty-second
0x0099	one-hundred-and-fifty-third
0x009A	one-hundred-and-fifty-fourth
0x009B	one-hundred-and-fifty-fifth
0x009C	one-hundred-and-fifty-sixth
0x009D	one-hundred-and-fifty-seventh
0x009E	one-hundred-and-fifty-eighth
0x009F	one-hundred-and-fifty-ninth
0x00A0	one-hundred-sixtieth
0x00A1	one-hundred-and-sixty-first
0x00A2	one-hundred-and-sixty-second
0x00A3	one-hundred-and-sixty-third
0x00A4	one-hundred-and-sixty-fourth
0x00A5	one-hundred-and-sixty-fifth
0x00A6	one-hundred-and-sixty-sixth
0x00A7	one-hundred-and-sixty-seventh
0x00A8	one-hundred-and-sixty-eighth
0x00A9	one-hundred-and-sixty-ninth
0x00AA	one-hundred-seventieth
0x00AB	one-hundred-and-seventy-first
0x00AC	one-hundred-and-seventy-second
0x00AD	one-hundred-and-seventy-third

`0x00AE`	one-hundred-and-seventy-fourth
`0x00AF`	one-hundred-and-seventy-fifth
`0x00B0`	one-hundred-and-seventy-sixth
`0x00B1`	one-hundred-and-seventy-seventh
`0x00B2`	one-hundred-and-seventy-eighth
`0x00B3`	one-hundred-and-seventy-ninth
`0x00B4`	one-hundred-eightieth
`0x00B5`	one-hundred-and-eighty-first
`0x00B6`	one-hundred-and-eighty-second
`0x00B7`	one-hundred-and-eighty-third
`0x00B8`	one-hundred-and-eighty-fourth
`0x00B9`	one-hundred-and-eighty-fifth
`0x00BA`	one-hundred-and-eighty-sixth
`0x00BB`	one-hundred-and-eighty-seventh
`0x00BC`	one-hundred-and-eighty-eighth
`0x00BD`	one-hundred-and-eighty-ninth
`0x00BE`	one-hundred-ninetieth
`0x00BF`	one-hundred-and-ninety-first
`0x00C0`	one-hundred-and-ninety-second
`0x00C1`	one-hundred-and-ninety-third
`0x00C2`	one-hundred-and-ninety-fourth
`0x00C3`	one-hundred-and-ninety-fifth
`0x00C4`	one-hundred-and-ninety-sixth
`0x00C5`	one-hundred-and-ninety-seventh
`0x00C6`	one-hundred-and-ninety-eighth
`0x00C7`	one-hundred-and-ninety-ninth
`0x00C8`	two-hundredth
`0x00C9`	two-hundred-and-first
`0x00CA`	two-hundred-and-second
`0x00CB`	two-hundred-and-third
`0x00CC`	two-hundred-and-fourth
`0x00CD`	two-hundred-and-fifth
`0x00CE`	two-hundred-and-sixth
`0x00CF`	two-hundred-and-seventh
`0x00D0`	two-hundred-and-eighth
`0x00D1`	two-hundred-and-ninth

0x00D2	two-hundred-and-tenth
0x00D3	two-hundred-and-eleventh
0x00D4	two-hundred-and-twelfth
0x00D5	two-hundred-and-thirteenth
0x00D6	two-hundred-and-fourteenth
0x00D7	two-hundred-and-fifteenth
0x00D8	two-hundred-and-sixteenth
0x00D9	two-hundred-and-seventeenth
0x00DA	two-hundred-and-eighteenth
0x00DB	two-hundred-and-nineteenth
0x00DC	two-hundred-twentieth
0x00DD	two-hundred-and-twenty-first
0x00DE	two-hundred-and-twenty-second
0x00DF	two-hundred-and-twenty-third
0x00E0	two-hundred-and-twenty-fourth
0x00E1	two-hundred-and-twenty-fifth
0x00E2	two-hundred-and-twenty-sixth
0x00E3	two-hundred-and-twenty-seventh
0x00E4	two-hundred-and-twenty-eighth
0x00E5	two-hundred-and-twenty-ninth
0x00E6	two-hundred-thirtieth
0x00E7	two-hundred-and-thirty-first
0x00E8	two-hundred-and-thirty-second
0x00E9	two-hundred-and-thirty-third
0x00EA	two-hundred-and-thirty-fourth
0x00EB	two-hundred-and-thirty-fifth
0x00EC	two-hundred-and-thirty-sixth
0x00ED	two-hundred-and-thirty-seventh
0x00EE	two-hundred-and-thirty-eighth
0x00EF	two-hundred-and-thirty-ninth
0x00F0	two-hundred-fortieth
0x00F1	two-hundred-and-forty-first
0x00F2	two-hundred-and-forty-second
0x00F3	two-hundred-and-forty-third
0x00F4	two-hundred-and-forty-fourth
0x00F5	two-hundred-and-forty-fifth

`0x00F6`	two-hundred-and-forty-sixth
`0x00F7`	two-hundred-and-forty-seventh
`0x00F8`	two-hundred-and-forty-eighth
`0x00F9`	two-hundred-and-forty-ninth
`0x00FA`	two-hundred-fiftieth
`0x00FB`	two-hundred-and-fifty-first
`0x00FC`	two-hundred-and-fifty-second
`0x00FD`	two-hundred-and-fifty-third
`0x00FE`	two-hundred-and-fifty-fourth
`0x00FF`	two-hundred-and-fifty-fifth
`0x0100`	front
`0x0101`	back
`0x0102`	top
`0x0103`	bottom
`0x0104`	upper
`0x0105`	lower
`0x0106`	main
`0x0107`	backup
`0x0108`	auxiliary
`0x0109`	supplementary
`0x010A`	flash
`0x010B`	inside
`0x010C`	outside
`0x010D`	left
`0x010E`	right
`0x010F`	internal
`0x0110`	external

2.5 PSMs and SPSMs

Referenced from the following:

- Bluetooth Core Specification [Vol 3] Part A, Section 4.2 [4].
- Bluetooth Core Specification [Vol 3] Part A, Section 4.22 [4].

Last Modified: 2023-08-16

Filename: assigned_numbers/core/psm.yaml

Value	Name	Reference	Type
0x0001	SDP	Bluetooth Core Specification [4]	PSM
0x0003	RFCOMM	RFCOMM [21]	PSM
0x0005	TCS-BIN	Telephony Control Protocol [23]	PSM
0x0007	TCS-BIN-CORDLESS	Telephony Control Protocol [23]	PSM
0x000F	BNEP	Bluetooth Network Encapsulation Protocol [5]	PSM
0x0011	HID_Control	Human Interface Device Profile [11]	PSM
0x0013	HID_Interrupt	Human Interface Device Profile [11]	PSM
0x0015	UPnP	Extended Service Discovery Profile for UPnP [8]	PSM
0x0017	AVCTP	Audio/Video Control Transport Protocol [2]	PSM
0x0019	AVDTP	Audio/Video Distribution Transport Protocol [3]	PSM
0x001B	AVCTP_Browsing	Audio/Video Control Transport Protocol [2]	PSM
0x001D	UDI_C-Plane	Unrestricted Digital Information Profile [24]	PSM
0x001F	ATT	Bluetooth Core Specification [4]	PSM
0x0021	3DSP	3D Synchronization Profile [1]	PSM
0x0023	LE_PSM_IPSP	Internet Protocol Support Profile [12]	SPSM
0x0025	OTS	Object Transfer Service [19]	PSM or SPSM
0x0027	EATT	Bluetooth Core Specification [4]	PSM or SPSM

2.6   Appearance Values

Referenced from the following:

- Bluetooth Core Specification [Vol 3] Part C, Section 12.2 [4].
- Supplement to the Bluetooth Core Specification Part A, Section 1.12.2 [22].

2.6.1   Definition

15	6	5	0
Category, see Section 2.6.2		Sub-category, see Section 2.6.3	
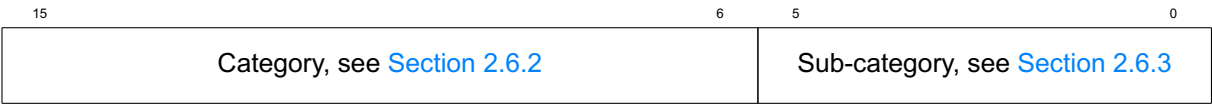
Figure 2.1: Appearance Value format

2.6.2   Appearance Category ranges

These are the assigned ranges of the appearance categories.

Last Modified: 2023-10-18

Filename: assigned_numbers/core/appearance_values.yaml

Category (bits 15 to 6)	Value Ranges	Name
0x000	0x0000 to 0x003F	Unknown
0x001	0x0040 to 0x007F	Phone
0x002	0x0080 to 0x00BF	Computer
0x003	0x00C0 to 0x00FF	Watch
0x004	0x0100 to 0x013F	Clock
0x005	0x0140 to 0x017F	Display
0x006	0x0180 to 0x01BF	Remote Control
0x007	0x01C0 to 0x01FF	Eye-glasses
0x008	0x0200 to 0x023F	Tag
0x009	0x0240 to 0x027F	Keyring
0x00A	0x0280 to 0x02BF	Media Player
0x00B	0x02C0 to 0x02FF	Barcode Scanner
0x00C	0x0300 to 0x033F	Thermometer
0x00D	0x0340 to 0x037F	Heart Rate Sensor
0x00E	0x0380 to 0x03BF	Blood Pressure
0x00F	0x03C0 to 0x03FF	Human Interface Device
0x010	0x0400 to 0x043F	Glucose Meter
0x011	0x0440 to 0x047F	Running Walking Sensor
0x012	0x0480 to 0x04BF	Cycling
0x013	0x04C0 to 0x04FF	Control Device
0x014	0x0500 to 0x053F	Network Device
0x015	0x0540 to 0x057F	Sensor
0x016	0x0580 to 0x05BF	Light Fixtures
0x017	0x05C0 to 0x05FF	Fan
0x018	0x0600 to 0x063F	HVAC
0x019	0x0640 to 0x067F	Air Conditioning
0x01A	0x0680 to 0x06BF	Humidifier
0x01B	0x06C0 to 0x06FF	Heating
0x01C	0x0700 to 0x073F	Access Control
0x01D	0x0740 to 0x077F	Motorized Device

0x01E	0x0780 to 0x07BF	Power Device
0x01F	0x07C0 to 0x07FF	Light Source
0x020	0x0800 to 0x083F	Window Covering
0x021	0x0840 to 0x087F	Audio Sink
0x022	0x0880 to 0x08BF	Audio Source
0x023	0x08C0 to 0x08FF	Motorized Vehicle
0x024	0x0900 to 0x093F	Domestic Appliance
0x025	0x0940 to 0x097F	Wearable Audio Device
0x026	0x0980 to 0x09BF	Aircraft
0x027	0x09C0 to 0x09FF	AV Equipment
0x028	0x0A00 to 0x0A3F	Display Equipment
0x029	0x0A40 to 0x0A7F	Hearing aid
0x02A	0x0A80 to 0x0ABF	Gaming
0x02B	0x0AC0 to 0x0AFF	Signage
0x031	0x0C40 to 0x0C7F	Pulse Oximeter
0x032	0x0C80 to 0x0CBF	Weight Scale
0x033	0x0CC0 to 0x0CFF	Personal Mobility Device
0x034	0x0D00 to 0x0D3F	Continuous Glucose Monitor
0x035	0x0D40 to 0x0D7F	Insulin Pump
0x036	0x0D80 to 0x0DBF	Medication Delivery
0x037	0x0DC0 to 0x0DFF	Spirometer
0x051	0x1440 to 0x147F	Outdoor Sports Activity

2.6.3   Appearance Sub-category values

These are the assigned values within the assigned ranges of appearance categories.

Last Modified: 2023-10-18

Filename: assigned_numbers/core/appearance_values.yaml

Category (bits 15 to 6)	Subcatgeory (bits 5 to 0)	Value	Name
0x000	0x00	0x0000	Generic Unknown
0x001	0x00	0x0040	Generic Phone
0x002	0x00	0x0080	Generic Computer
	0x01	0x0081	Desktop Workstation
	0x02	0x0082	Server-class Computer
	0x03	0x0083	Laptop
	0x04	0x0084	Handheld PC/PDA (clamshell)
	0x05	0x0085	Palm-size PC/PDA
	0x06	0x0086	Wearable computer (watch size)
	0x07	0x0087	Tablet
	0x08	0x0088	Docking Station
	0x09	0x0089	All in One
	0x0A	0x008A	Blade Server
	0x0B	0x008B	Convertible
	0x0C	0x008C	Detachable
	0x0D	0x008D	IoT Gateway
	0x0E	0x008E	Mini PC
	0x0F	0x008F	Stick PC
0x003	0x00	0x00C0	Generic Watch
	0x01	0x00C1	Sports Watch
	0x02	0x00C2	Smartwatch
0x004	0x00	0x0100	Generic Clock
0x005	0x00	0x0140	Generic Display
0x006	0x00	0x0180	Generic Remote Control
0x007	0x00	0x01C0	Generic Eye-glasses
0x008	0x00	0x0200	Generic Tag
0x009	0x00	0x0240	Generic Keyring
0x00A	0x00	0x0280	Generic Media Player
0x00B	0x00	0x02C0	Generic Barcode Scanner
0x00C	0x00	0x0300	Generic Thermometer

	0x01	0x0301	Ear Thermometer
0x00D	0x00	0x0340	Generic Heart Rate Sensor
	0x01	0x0341	Heart Rate Belt
0x00E	0x00	0x0380	Generic Blood Pressure
	0x01	0x0381	Arm Blood Pressure
	0x02	0x0382	Wrist Blood Pressure
0x00F	0x00	0x03C0	Generic Human Interface Device
	0x01	0x03C1	Keyboard
	0x02	0x03C2	Mouse
	0x03	0x03C3	Joystick
	0x04	0x03C4	Gamepad
	0x05	0x03C5	Digitizer Tablet
	0x06	0x03C6	Card Reader
	0x07	0x03C7	Digital Pen
	0x08	0x03C8	Barcode Scanner
	0x09	0x03C9	Touchpad
	0x0A	0x03CA	Presentation Remote
0x010	0x00	0x0400	Generic Glucose Meter
0x011	0x00	0x0440	Generic Running Walking Sensor
	0x01	0x0441	In-Shoe Running Walking Sensor
	0x02	0x0442	On-Shoe Running Walking Sensor
	0x03	0x0443	On-Hip Running Walking Sensor
0x012	0x00	0x0480	Generic Cycling
	0x01	0x0481	Cycling Computer
	0x02	0x0482	Speed Sensor
	0x03	0x0483	Cadence Sensor
	0x04	0x0484	Power Sensor
	0x05	0x0485	Speed and Cadence Sensor
0x013	0x00	0x04C0	Generic Control Device
	0x01	0x04C1	Switch
	0x02	0x04C2	Multi-switch
	0x03	0x04C3	Button
	0x04	0x04C4	Slider
	0x05	0x04C5	Rotary Switch
	0x06	0x04C6	Touch Panel
	0x07	0x04C7	Single Switch
	0x08	0x04C8	Double Switch

	0x09	0x04C9	Triple Switch
	0x0A	0x04CA	Battery Switch
	0x0B	0x04CB	Energy Harvesting Switch
	0x0C	0x04CC	Push Button
	0x0D	0x04CD	Dial
0x014	0x00	0x0500	Generic Network Device
	0x01	0x0501	Access Point
	0x02	0x0502	Mesh Device
	0x03	0x0503	Mesh Network Proxy
0x015	0x00	0x0540	Generic Sensor
	0x01	0x0541	Motion Sensor
	0x02	0x0542	Air quality Sensor
	0x03	0x0543	Temperature Sensor
	0x04	0x0544	Humidity Sensor
	0x05	0x0545	Leak Sensor
	0x06	0x0546	Smoke Sensor
	0x07	0x0547	Occupancy Sensor
	0x08	0x0548	Contact Sensor
	0x09	0x0549	Carbon Monoxide Sensor
	0x0A	0x054A	Carbon Dioxide Sensor
	0x0B	0x054B	Ambient Light Sensor
	0x0C	0x054C	Energy Sensor
	0x0D	0x054D	Color Light Sensor
	0x0E	0x054E	Rain Sensor
	0x0F	0x054F	Fire Sensor
	0x10	0x0550	Wind Sensor
	0x11	0x0551	Proximity Sensor
	0x12	0x0552	Multi-Sensor
	0x13	0x0553	Flush Mounted Sensor
	0x14	0x0554	Ceiling Mounted Sensor
	0x15	0x0555	Wall Mounted Sensor
	0x16	0x0556	Multisensor
	0x17	0x0557	Energy Meter
	0x18	0x0558	Flame Detector
	0x19	0x0559	Vehicle Tire Pressure Sensor
0x016	0x00	0x0580	Generic Light Fixtures
	0x01	0x0581	Wall Light

	0x02	0x0582	Ceiling Light
	0x03	0x0583	Floor Light
	0x04	0x0584	Cabinet Light
	0x05	0x0585	Desk Light
	0x06	0x0586	Troffer Light
	0x07	0x0587	Pendant Light
	0x08	0x0588	In-ground Light
	0x09	0x0589	Flood Light
	0x0A	0x058A	Underwater Light
	0x0B	0x058B	Bollard with Light
	0x0C	0x058C	Pathway Light
	0x0D	0x058D	Garden Light
	0x0E	0x058E	Pole-top Light
	0x0F	0x058F	Spotlight
	0x10	0x0590	Linear Light
	0x11	0x0591	Street Light
	0x12	0x0592	Shelves Light
	0x13	0x0593	Bay Light
	0x14	0x0594	Emergency Exit Light
	0x15	0x0595	Light Controller
	0x16	0x0596	Light Driver
	0x17	0x0597	Bulb
	0x18	0x0598	Low-bay Light
	0x19	0x0599	High-bay Light
0x017	0x00	0x05C0	Generic Fan
	0x01	0x05C1	Ceiling Fan
	0x02	0x05C2	Axial Fan
	0x03	0x05C3	Exhaust Fan
	0x04	0x05C4	Pedestal Fan
	0x05	0x05C5	Desk Fan
	0x06	0x05C6	Wall Fan
0x018	0x00	0x0600	Generic HVAC
	0x01	0x0601	Thermostat
	0x02	0x0602	Humidifier
	0x03	0x0603	De-humidifier
	0x04	0x0604	Heater
	0x05	0x0605	Radiator

	0x06	0x0606	Boiler
	0x07	0x0607	Heat Pump
	0x08	0x0608	Infrared Heater
	0x09	0x0609	Radiant Panel Heater
	0x0A	0x060A	Fan Heater
	0x0B	0x060B	Air Curtain
0x019	0x00	0x0640	Generic Air Conditioning
0x01A	0x00	0x0680	Generic Humidifier
0x01B	0x00	0x06C0	Generic Heating
	0x01	0x06C1	Radiator
	0x02	0x06C2	Boiler
	0x03	0x06C3	Heat Pump
	0x04	0x06C4	Infrared Heater
	0x05	0x06C5	Radiant Panel Heater
	0x06	0x06C6	Fan Heater
	0x07	0x06C7	Air Curtain
0x01C	0x00	0x0700	Generic Access Control
	0x01	0x0701	Access Door
	0x02	0x0702	Garage Door
	0x03	0x0703	Emergency Exit Door
	0x04	0x0704	Access Lock
	0x05	0x0705	Elevator
	0x06	0x0706	Window
	0x07	0x0707	Entrance Gate
	0x08	0x0708	Door Lock
	0x09	0x0709	Locker
0x01D	0x00	0x0740	Generic Motorized Device
	0x01	0x0741	Motorized Gate
	0x02	0x0742	Awning
	0x03	0x0743	Blinds or Shades
	0x04	0x0744	Curtains
	0x05	0x0745	Screen
0x01E	0x00	0x0780	Generic Power Device
	0x01	0x0781	Power Outlet
	0x02	0x0782	Power Strip
	0x03	0x0783	Plug
	0x04	0x0784	Power Supply

	0x05	0x0785	LED Driver
	0x06	0x0786	Fluorescent Lamp Gear
	0x07	0x0787	HID Lamp Gear
	0x08	0x0788	Charge Case
	0x09	0x0789	Power Bank
0x01F	0x00	0x07C0	Generic Light Source
	0x01	0x07C1	Incandescent Light Bulb
	0x02	0x07C2	LED Lamp
	0x03	0x07C3	HID Lamp
	0x04	0x07C4	Fluorescent Lamp
	0x05	0x07C5	LED Array
	0x06	0x07C6	Multi-Color LED Array
	0x07	0x07C7	Low voltage halogen
	0x08	0x07C8	Organic light emitting diode (OLED)
0x020	0x00	0x0800	Generic Window Covering
	0x01	0x0801	Window Shades
	0x02	0x0802	Window Blinds
	0x03	0x0803	Window Awning
	0x04	0x0804	Window Curtain
	0x05	0x0805	Exterior Shutter
	0x06	0x0806	Exterior Screen
0x021	0x00	0x0840	Generic Audio Sink
	0x01	0x0841	Standalone Speaker
	0x02	0x0842	Soundbar
	0x03	0x0843	Bookshelf Speaker
	0x04	0x0844	Standmounted Speaker
	0x05	0x0845	Speakerphone
0x022	0x00	0x0880	Generic Audio Source
	0x01	0x0881	Microphone
	0x02	0x0882	Alarm
	0x03	0x0883	Bell
	0x04	0x0884	Horn
	0x05	0x0885	Broadcasting Device
	0x06	0x0886	Service Desk
	0x07	0x0887	Kiosk
	0x08	0x0888	Broadcasting Room

	0x09	0x0889	Auditorium
0x023	0x00	0x08C0	Generic Motorized Vehicle
	0x01	0x08C1	Car
	0x02	0x08C2	Large Goods Vehicle
	0x03	0x08C3	2-Wheeled Vehicle
	0x04	0x08C4	Motorbike
	0x05	0x08C5	Scooter
	0x06	0x08C6	Moped
	0x07	0x08C7	3-Wheeled Vehicle
	0x08	0x08C8	Light Vehicle
	0x09	0x08C9	Quad Bike
	0x0A	0x08CA	Minibus
	0x0B	0x08CB	Bus
	0x0C	0x08CC	Trolley
	0x0D	0x08CD	Agricultural Vehicle
	0x0E	0x08CE	Camper / Caravan
	0x0F	0x08CF	Recreational Vehicle / Motor Home
0x024	0x00	0x0900	Generic Domestic Appliance
	0x01	0x0901	Refrigerator
	0x02	0x0902	Freezer
	0x03	0x0903	Oven
	0x04	0x0904	Microwave
	0x05	0x0905	Toaster
	0x06	0x0906	Washing Machine
	0x07	0x0907	Dryer
	0x08	0x0908	Coffee maker
	0x09	0x0909	Clothes iron
	0x0A	0x090A	Curling iron
	0x0B	0x090B	Hair dryer
	0x0C	0x090C	Vacuum cleaner
	0x0D	0x090D	Robotic vacuum cleaner
	0x0E	0x090E	Rice cooker
	0x0F	0x090F	Clothes steamer
0x025	0x00	0x0940	Generic Wearable Audio Device
	0x01	0x0941	Earbud
	0x02	0x0942	Headset
	0x03	0x0943	Headphones

	0x04	0x0944	Neck Band
0x026	0x00	0x0980	Generic Aircraft
	0x01	0x0981	Light Aircraft
	0x02	0x0982	Microlight
	0x03	0x0983	Paraglider
	0x04	0x0984	Large Passenger Aircraft
0x027	0x00	0x09C0	Generic AV Equipment
	0x01	0x09C1	Amplifier
	0x02	0x09C2	Receiver
	0x03	0x09C3	Radio
	0x04	0x09C4	Tuner
	0x05	0x09C5	Turntable
	0x06	0x09C6	CD Player
	0x07	0x09C7	DVD Player
	0x08	0x09C8	Bluray Player
	0x09	0x09C9	Optical Disc Player
	0x0A	0x09CA	Set-Top Box
0x028	0x00	0x0A00	Generic Display Equipment
	0x01	0x0A01	Television
	0x02	0x0A02	Monitor
	0x03	0x0A03	Projector
0x029	0x00	0x0A40	Generic Hearing aid
	0x01	0x0A41	In-ear hearing aid
	0x02	0x0A42	Behind-ear hearing aid
	0x03	0x0A43	Cochlear Implant
0x02A	0x00	0x0A80	Generic Gaming
	0x01	0x0A81	Home Video Game Console
	0x02	0x0A82	Portable handheld console
0x02B	0x00	0x0AC0	Generic Signage
	0x01	0x0AC1	Digital Signage
	0x02	0x0AC2	Electronic Label
0x031	0x00	0x0C40	Generic Pulse Oximeter
	0x01	0x0C41	Fingertip Pulse Oximeter
	0x02	0x0C42	Wrist Worn Pulse Oximeter
0x032	0x00	0x0C80	Generic Weight Scale
0x033	0x00	0x0CC0	Generic Personal Mobility Device
	0x01	0x0CC1	Powered Wheelchair

	0x02	0x0CC2	Mobility Scooter
0x034	0x00	0x0D00	Generic Continuous Glucose Monitor
0x035	0x00	0x0D40	Generic Insulin Pump
	0x01	0x0D41	Insulin Pump, durable pump
	0x04	0x0D44	Insulin Pump, patch pump
	0x08	0x0D48	Insulin Pen
0x036	0x00	0x0D80	Generic Medication Delivery
0x037	0x00	0x0DC0	Generic Spirometer
	0x01	0x0DC1	Handheld Spirometer
0x051	0x00	0x1440	Generic Outdoor Sports Activity
	0x01	0x1441	Location Display
	0x02	0x1442	Location and Navigation Display
	0x03	0x1443	Location Pod
	0x04	0x1444	Location and Navigation Pod

2.7   URI Scheme Name String Mapping

Referenced from Supplement to the Bluetooth Core Specification Part A, Section 1.18.1 [22].

Last Modified: 2023-02-02

Filename: assigned_numbers/core/uri_schemes.yaml

Value	URI Scheme
U+0001	empty scheme name
U+0002	aaa:
U+0003	aaas:
U+0004	about:
U+0005	acap:
U+0006	acct:
U+0007	cap:
U+0008	cid:
U+0009	coap:
U+000A	coaps:
U+000B	crid:
U+000C	data:
U+000D	dav:
U+000E	dict:
U+000F	dns:
U+0010	file:
U+0011	ftp:
U+0012	geo:
U+0013	go:
U+0014	gopher:
U+0015	h323:
U+0016	http:
U+0017	https:
U+0018	iax:
U+0019	icap:
U+001A	im:
U+001B	imap:
U+001C	info:
U+001D	ipp:
U+001E	ipps:
U+001F	iris:

U+0020	iris.beep:
U+0021	iris.xpc:
U+0022	iris.xpcs:
U+0023	iris.lwz:
U+0024	jabber:
U+0025	ldap:
U+0026	mailto:
U+0027	mid:
U+0028	msrp:
U+0029	msrps:
U+002A	mtqp:
U+002B	mupdate:
U+002C	news:
U+002D	nfs:
U+002E	ni:
U+002F	nih:
U+0030	nntp:
U+0031	opaquelocktoken:
U+0032	pop:
U+0033	pres:
U+0034	reload:
U+0035	rtsp:
U+0036	rtsps:
U+0037	rtspu:
U+0038	service:
U+0039	session:
U+003A	shttp:
U+003B	sieve:
U+003C	sip:
U+003D	sips:
U+003E	sms:
U+003F	snmp:
U+0040	soap.beep:
U+0041	soap.beeps:
U+0042	stun:
U+0043	stuns:

U+0044	tag:
U+0045	tel:
U+0046	telnet:
U+0047	tftp:
U+0048	thismessage:
U+0049	tn3270:
U+004A	tip:
U+004B	turn:
U+004C	turns:
U+004D	tv:
U+004E	urn:
U+004F	vemmi:
U+0050	ws:
U+0051	wss:
U+0052	xcon:
U+0053	xcon-userid:
U+0054	xmlrpc.beep:
U+0055	xmlrpc.beeps:
U+0056	xmpp:
U+0057	z39.50r:
U+0058	z39.50s:
U+0059	acr:
U+005A	adiumxtra:
U+005B	afp:
U+005C	afs:
U+005D	aim:
U+005E	apt:
U+005F	attachment:
U+0060	aw:
U+0061	barion:
U+0062	beshare:
U+0063	bitcoin:
U+0064	bolo:
U+0065	callto:
U+0066	chrome:
U+0067	chrome-extension:

U+0068	com-eventbrite-attendee:
U+0069	content:
U+006A	cvs:
U+006B	dlna-playsingle:
U+006C	dlna-playcontainer:
U+006D	dtn:
U+006E	dvb:
U+006F	ed2k:
U+0070	facetime:
U+0071	feed:
U+0072	feedready:
U+0073	finger:
U+0074	fish:
U+0075	gg:
U+0076	git:
U+0077	gizmoproject:
U+0078	gtalk:
U+0079	ham:
U+007A	hcp:
U+007B	icon:
U+007C	ipn:
U+007D	irc:
U+007E	irc6:
U+007F	ircs:
U+0080	itms:
U+0081	jar:
U+0082	jms:
U+0083	keyparc:
U+0084	lastfm:
U+0085	ldaps:
U+0086	magnet:
U+0087	maps:
U+0088	market:
U+0089	message:
U+008A	mms:
U+008B	ms-help:

U+008C	ms-settings-power:
U+008D	msnim:
U+008E	mumble:
U+008F	mvn:
U+0090	notes:
U+0091	oid:
U+0092	palm:
U+0093	paparazzi:
U+0094	pkcs11:
U+0095	platform:
U+0096	proxy:
U+0097	psyc:
U+0098	query:
U+0099	res:
U+009A	resource:
U+009B	rmi:
U+009C	rsync:
U+009D	rtmfp:
U+009E	rtmp:
U+009F	secondlife:
U+00A0	sftp:
U+00A1	sgn:
U+00A2	skype:
U+00A3	smb:
U+00A4	smtp:
U+00A5	soldat:
U+00A6	spotify:
U+00A7	ssh:
U+00A8	steam:
U+00A9	submit:
U+00AA	svn:
U+00AB	teamspeak:
U+00AC	teliaeid:
U+00AD	things:
U+00AE	udp:
U+00AF	unreal:

U+00B0	ut2004:
U+00B1	ventrilo:
U+00B2	view-source:
U+00B3	webcal:
U+00B4	wtai:
U+00B5	wyciwyg:
U+00B6	xfire:
U+00B7	xri:
U+00B8	ymsgr:
U+00B9	example:
U+00BA	ms-settings-cloudstorage:

2.8   Class of Device

Referenced from the following:

- Bluetooth Core Specification [Vol 2] Part B, Section 6.5.1.4 [4].
- Supplement to the Bluetooth Core Specification Part A, Section 1.6.2 [22].

The Class of Device is composed of four fields: A Major Service Classes bitfield, a Major Device Class enumerated value, the Minor Device Class value, and a fixed value of 0b00 in the two least significant bits. The format of the Minor Device Class is determined by the Major Device Class value. The structure of the Class of Device is defined below:

23	13	12	8	7	2	1	0
Major Service Classes		Major Device Class		Minor Device Class		0b00	
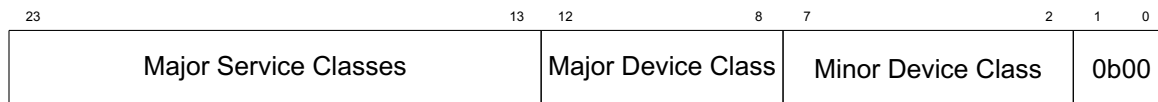
Figure 2.2: Class of Device format

2.8.1   Major Service Classes

Last Modified: 2023-10-18

Filename: assigned_numbers/core/class_of_device.yaml

Bit	Class of Device Major Service Class
13	Limited Discoverable Mode
14	LE audio
15	Reserved for Future Use
16	Positioning (Location identification)
17	Networking (LAN, Ad hoc, ...)
18	Rendering (Printing, Speakers, ...)
19	Capturing (Scanner, Microphone, ...)
20	Object Transfer (v-Inbox, v-Folder, ...)
21	Audio (Speaker, Microphone, Headset service, ...)
22	Telephony (Cordless telephony, Modem, Headset service, ...)
23	Information (WEB-server, WAP-server, ...)

2.8.2 Major Device Class

The "Miscellaneous" Major Device Class is used where a more specific Major Device Class code is not suitable. A device that does not have a Major Class Code assigned can use the "Uncategorized: device code not specified" code until classified.

Last Modified: 2023-10-18

Filename: assigned_numbers/core/class_of_device.yaml

12	11	10	9	8	Major Device Class
0	0	0	0	0	Miscellaneous
0	0	0	0	1	Computer (desktop, notebook, PDA, organizer, ...)
0	0	0	1	0	Phone (cellular, cordless, pay phone, modem, ...)
0	0	0	1	1	LAN/Network Access Point
0	0	1	0	0	Audio/Video (headset, speaker, stereo, video display, VCR, ...)
0	0	1	0	1	Peripheral (mouse, joystick, keyboard, ...)
0	0	1	1	0	Imaging (printer, scanner, camera, display, ...)
0	0	1	1	1	Wearable
0	1	0	0	0	Toy
0	1	0	0	1	Health
1	1	1	1	1	Uncategorized (device code not specified)

2.8.2.1   Minor Device Class field – Computer Major Class

Last Modified: 2023-10-18

Filename: assigned_numbers/core/class_of_device.yaml

7	6	5	4	3	2	**Minor Device Class**
0	0	0	0	0	0	Uncategorized (code for device not assigned)
0	0	0	0	0	1	Desktop Workstation
0	0	0	0	1	0	Server-class Computer
0	0	0	0	1	1	Laptop
0	0	0	1	0	0	Handheld PC/PDA (clamshell)
0	0	0	1	0	1	Palm-size PC/PDA
0	0	0	1	1	0	Wearable Computer (watch size)
0	0	0	1	1	1	Tablet

2.8.2.2   Minor Device Class field – Phone Major Class

Last Modified: 2023-10-18

Filename: assigned_numbers/core/class_of_device.yaml

7	6	5	4	3	2	**Minor Device Class**
0	0	0	0	0	0	Uncategorized (code for device not assigned)
0	0	0	0	0	1	Cellular
0	0	0	0	1	0	Cordless
0	0	0	0	1	1	Smartphone
0	0	0	1	0	0	Wired Modem or Voice Gateway
0	0	0	1	0	1	Common ISDN Access

2.8.2.3   Minor Device Class field – LAN/Network Access Point Major Class

Last Modified: 2023-10-18

Filename: assigned_numbers/core/class_of_device.yaml

7	6	5	Minor Device Class
0	0	0	Fully available
0	0	1	1% to 17% utilized
0	1	0	17% to 33% utilized
0	1	1	33% to 50% utilized
1	0	0	50% to 67% utilized
1	0	1	67% to 83% utilized
1	1	0	83% to 99% utilized
1	1	1	No service available

Last Modified: 2023-10-18

Filename: assigned_numbers/core/class_of_device.yaml

4	3	2	Minor Device Class
0	0	0	Uncategorized (use this value if no others apply)

2.8.2.4 Minor Device Class field – Audio/Video Major Class

Last Modified: 2023-10-18

Filename: assigned_numbers/core/class_of_device.yaml

7	6	5	4	3	2	Minor Device Class
0	0	0	0	0	0	Uncategorized (code not assigned)
0	0	0	0	0	1	Wearable Headset Device
0	0	0	0	1	0	Hands-free Device
0	0	0	0	1	1	Reserved for Future Use
0	0	0	1	0	0	Microphone
0	0	0	1	0	1	Loudspeaker
0	0	0	1	1	0	Headphones
0	0	0	1	1	1	Portable Audio
0	0	1	0	0	0	Car Audio
0	0	1	0	0	1	Set-top box
0	0	1	0	1	0	HiFi Audio Device
0	0	1	0	1	1	VCR
0	0	1	1	0	0	Video Camera
0	0	1	1	0	1	Camcorder
0	0	1	1	1	0	Video Monitor
0	0	1	1	1	1	Video Display and Loudspeaker
0	1	0	0	0	0	Video Conferencing
0	1	0	0	0	1	Reserved for Future Use
0	1	0	0	1	0	Gaming/Toy

2.8.2.5 Minor Device Class field – Peripheral Major Class

Last Modified: 2023-10-18

Filename: assigned_numbers/core/class_of_device.yaml

7	6	Minor Device Class
0	0	Uncategorized (code not assigned)
0	1	Keyboard
1	0	Pointing Device
1	1	Combo Keyboard/Pointing Device

Last Modified: 2023-10-18

Filename: assigned_numbers/core/class_of_device.yaml

5	4	3	2	Minor Device Class
0	0	0	0	Uncategorized (code not assigned)
0	0	0	1	Joystick
0	0	1	0	Gamepad
0	0	1	1	Remote Control
0	1	0	0	Sensing Device
0	1	0	1	Digitizer Tablet
0	1	1	0	Card Reader (e.g., SIM Card Reader)
0	1	1	1	Digital Pen
1	0	0	0	Handheld Scanner (e.g., barcodes, RFID)
1	0	0	1	Handheld Gestural Input Device (e.g., "wand" form factor)

2.8.2.6   Minor Device Class field – Imaging Major Class

Last Modified: 2023-10-18

Filename: assigned_numbers/core/class_of_device.yaml

7	6	5	4	Minor Device Class
X	X	X	1	Display
X	X	1	X	Camera
X	1	X	X	Scanner
1	X	X	X	Printer

Last Modified: 2023-10-18

Filename: assigned_numbers/core/class_of_device.yaml

3	2	Minor Device Class
0	0	Uncategorized (default)

2.8.2.7   Minor Device Class field – Wearable Major Class

Last Modified: 2023-10-18

Filename: assigned_numbers/core/class_of_device.yaml

7	6	5	4	3	2	Minor Device Class
0	0	0	0	0	1	Wristwatch
0	0	0	0	1	0	Pager
0	0	0	0	1	1	Jacket
0	0	0	1	0	0	Helmet
0	0	0	1	0	1	Glasses
0	0	0	1	1	0	Pin (e.g., lapel pin, broach, badge)

2.8.2.8 Minor Device Class field – Toy Major Class

Last Modified: 2023-10-18

Filename: assigned_numbers/core/class_of_device.yaml

7	6	5	4	3	2	Minor Device Class
0	0	0	0	0	1	Robot
0	0	0	0	1	0	Vehicle
0	0	0	0	1	1	Doll/Action Figure
0	0	0	1	0	0	Controller
0	0	0	1	0	1	Game

2.8.2.9 Minor Device Class field – Health Major Class

Last Modified: 2023-10-18

Filename: assigned_numbers/core/class_of_device.yaml

7	6	5	4	3	2	Minor Device Class
0	0	0	0	0	0	Undefined
0	0	0	0	0	1	Blood Pressure Monitor
0	0	0	0	1	0	Thermometer
0	0	0	0	1	1	Weighing Scale
0	0	0	1	0	0	Glucose Meter
0	0	0	1	0	1	Pulse Oximeter
0	0	0	1	1	0	Heart/Pulse Rate Monitor
0	0	0	1	1	1	Health Data Display
0	0	1	0	0	0	Step Counter
0	0	1	0	0	1	Body Composition Analyzer
0	0	1	0	1	0	Peak Flow Monitor
0	0	1	0	1	1	Medication Monitor
0	0	1	1	0	0	Knee Prosthesis
0	0	1	1	0	1	Ankle Prosthesis
0	0	1	1	1	0	Generic Health Manager
0	0	1	1	1	1	Personal Mobility Device

2.9   LE-U CID

Referenced from Bluetooth Core Specification [Vol 3] Part A, Section 2.1 [4].

Last Modified: 2021-11-24

CID	Description
0x0020 to 0x003E	Reserved for future use

2.10   PCM_Data_Format

Reference from Bluetooth Core Specification [Vol 4] Part E, Section 7.1.45 [4].

Last Modified: 2023-02-02

Filename: assigned_numbers/core/pcm_data_format.yaml

Value	Name	Notes
0x00	N/A	This value does not apply to the coding format in use.
0x01	1's complement	
0x02	2's complement	
0x03	Sign-magnitude	
0x04	Unsigned	

2.11   Coding_Format and Codec_ID (HCI)

Referenced from the following:

- Bluetooth Core Specification [Vol 4] Part E, Section 7.1.45 [4].
- Bluetooth Core Specification [Vol 4] Part E, Section 7.1.46 [4].
- Bluetooth Core Specification [Vol 4] Part E, Section 7.4.8 [4].
- Bluetooth Core Specification [Vol 4] Part E, Section 7.4.10 [4].
- Bluetooth Core Specification [Vol 4] Part E, Section 7.8.109 [4].

Last Modified: 2023-02-02

Filename: assigned_numbers/core/coding_format.yaml

Value	Name	Notes
0x00	µ-law log	
0x01	A-law log	
0x02	CVSD	
0x03	Transparent	Indicates that the controller does not do any transcoding or resampling. See the command description for restrictions on the use of this value. This is also used for test mode
0x04	Linear PCM	
0x05	mSBC	
0x06	LC3	
0x07	G.729A	
0xFF	Vendor Specific	The codec is vendor-specific, as defined by the following 4 octets in the full coding format.

2.12   MWS

2.12.1   MWS Coexistence Transport Layer

Referenced from the following:

• Bluetooth Core Specification [Vol 4] Part E, Section 7.3.83 [4].
• Bluetooth Core Specification [Vol 4] Part E, Section 7.5.11 [4].

Last Modified: 2023-02-02

Filename: assigned_numbers/core/transport_layers.yaml

Value	Name
0x00	Disabled
0x01	WCI-1 Transport
0x02	WCI-2 Transport

2.12.2   MWS Channel Type

Referenced from Bluetooth Core Specification [Vol 4] Part E, Section 7.3.80 [4].

Last Modified: 2023-02-02

Filename: assigned_numbers/core/mws_channel_type.yaml

Value	Name
0x00	TDD
0x01	FDD

2.13   AMP

The features utilizing the values in this section have been removed from the Core Specification v5.3 and later.

2.13.1   AMP Controller Type

These values are only used in the Bluetooth Core Specification version from v3.0+HS to v5.2.

Last Modified: 2023-02-02

Filename: assigned_numbers/core/amp.yaml

Value	Controller
0x00	Primary BR/EDR Controller
0x01	802.11 AMP Controller

2.13.2   AMP Security keyIDs

These values are only used in the Bluetooth Core Specification version from v3.0+HS to v5.2.

Last Modified: 2023-02-02

Filename: assigned_numbers/core/amp.yaml

Key	Name
'802b'	802.11 PAL keyID

2.13.3   AMP Security keyLength

These values are only used in the Bluetooth Core Specification version from v3.0+HS to v5.2.

Last Modified: 2023-02-02

Filename: assigned_numbers/core/amp.yaml

keyLength	Name
32	802.11 PAL keyLength

2.13.4   PAL Versions

These values are only used in the Bluetooth Core Specification version from v3.0+HS to v5.2.

Last Modified: 2023-02-02

Filename: assigned_numbers/core/amp.yaml

Core Specification Name	PAL Version
Bluetooth Core Specification 3.0 + HS and later	0x01

3 16-bit UUIDs

See Bluetooth Core Specification [Vol 3] Part B, Section 2.5.1 [4].

3.1 Protocol Identifiers

See Bluetooth Core Specification [Vol 3] Part B, Section 5.1.5 [4].

Last Modified: 2023-02-02

Filename: assigned_numbers/uuids/protocol_identifiers.yaml

UUID	Protocol	Reference
0x0001	SDP	Bluetooth Core Specification [4]
0x0002	UDP	Personal Area Networking Profile [20]
0x0003	RFCOMM	RFCOMM [21]
0x0004	TCP	Personal Area Networking Profile [20]
0x0005	TCS-BIN	Telephony Control Protocol [23]
0x0006	TCS-AT	Telephony Control Protocol [23]
0x0007	ATT	Bluetooth Core Specification [4]
0x0008	OBEX	IrDA Interoperability [13]
0x0009	IP	Personal Area Networking Profile [20]
0x000A	FTP	Personal Area Networking Profile [20]
0x000C	HTTP	Personal Area Networking Profile [20]
0x000E	WSP	WAP Bearer [26]
0x000F	BNEP	Bluetooth Network Encapsulation Protocol [5]
0x0010	UPNP	Extended Service Discovery Profile for UPnP [8]
0x0011	HIDP	Human Interface Device Profile [11]
0x0012	HardcopyControlChannel	Hardcopy Cable Replacement Profile [9]
0x0014	HardcopyDataChannel	Hardcopy Cable Replacement Profile [9]
0x0016	HardcopyNotification	Hardcopy Cable Replacement Profile [9]
0x0017	AVCTP	Audio/Video Control Transport Protocol [2]
0x0019	AVDTP	Audio/Video Distribution Transport Protocol [3]
0x001B	CMTP	Common ISDN Access Profile [6]
0x001E	MCAPControlChannel	Health Device Profile [10]
0x001F	MCAPDataChannel	Health Device Profile [10]
0x0100	L2CAP	Bluetooth Core Specification [4]

3.2   Browse Group Identifiers

Referenced from Bluetooth Core Specification [Vol 3] Part B, Section 5.1.7 [4].

Last Modified: 2023-02-02

Filename: assigned_numbers/uuids/browse_group_identifiers.yaml

UUID	Protocol
0x1002	PublicBrowseRoot

3.3   SDP Service Class and Profile Identifiers

See Bluetooth Core Specification [Vol 3] Part B, Section 5.1.2 [4].

Last Modified: 2023-02-02

Filename: assigned_numbers/uuids/service_class.yaml

UUID	Name	Type
0x1000	ServiceDiscoveryServerServiceClassID	Service Class
0x1001	BrowseGroupDescriptorServiceClassID	Service Class
0x1101	SerialPort	Service Class and Profile
0x1102	LANAccessUsingPPP	Service Class and Profile
0x1103	DialupNetworking	Service Class and Profile
0x1104	IrMCSync	Service Class and Profile
0x1105	OBEXObjectPush	Service Class and Profile
0x1106	OBEXFileTransfer	Service Class and Profile
0x1107	IrMCSyncCommand	Service Class and Profile
0x1108	Headset	Service Class and Profile
0x1109	CordlessTelephony	Service Class and Profile
0x110A	AudioSource	Service Class
0x110B	AudioSink	Service Class
0x110C	A/V_RemoteControlTarget	Service Class
0x110D	AdvancedAudioDistribution	Profile
0x110E	A/V_RemoteControl	Service Class and Profile
0x110F	A/V_RemoteControlController	Service Class
0x1110	Intercom	Service Class
0x1111	Fax	Service Class
0x1112	Headset - Audio Gateway	Service Class
0x1113	WAP	Service Class
0x1114	WAP_CLIENT	Service Class
0x1115	PANU	Service Class and Profile
0x1116	NAP	Service Class and Profile
0x1117	GN	Service Class and Profile
0x1118	DirectPrinting	Service Class
0x1119	ReferencePrinting	Service Class
0x111A	Basic Imaging Profile	Profile
0x111B	ImagingResponder	Service Class
0x111C	ImagingAutomaticArchive	Service Class
0x111D	ImagingReferencedObjects	Service Class

0x111E	Handsfree	Service Class and Profile
0x111F	HandsfreeAudioGateway	Service Class
0x1120	DirectPrintingReferenceObjectsService	Service Class
0x1121	ReflectedUI	Service Class
0x1122	BasicPrinting	Profile
0x1123	PrintingStatus	Service Class
0x1124	HumanInterfaceDeviceService	Service Class and Profile
0x1125	HardcopyCableReplacement	Profile
0x1126	HCR_Print	Service Class
0x1127	HCR_Scan	Service Class
0x1128	Common_ISDN_Access	Service Class and Profile
0x112D	SIM_Access	Service Class and Profile
0x112E	Phonebook Access - PCE	Service Class
0x112F	Phonebook Access - PSE	Service Class
0x1130	Phonebook Access	Profile
0x1131	Headset - HS	Service Class
0x1132	Message Access Server	Service Class
0x1133	Message Notification Server	Service Class
0x1134	Message Access Profile	Profile
0x1135	GNSS	Profile
0x1136	GNSS_Server	Service Class
0x1137	3D Display	Service Class
0x1138	3D Glasses	Service Class
0x1139	3D Synchronization	Profile
0x113A	MPS Profile	Profile
0x113B	MPS SC	Service Class
0x113C	CTN Access Service	Service Class
0x113D	CTN Notification Service	Service Class
0x113E	CTN Profile	Profile
0x1200	PnPInformation	Service Class and Profile
0x1201	GenericNetworking	Service Class
0x1202	GenericFileTransfer	Service Class
0x1203	GenericAudio	Service Class
0x1204	GenericTelephony	Service Class
0x1205	UPNP_Service	Service Class
0x1206	UPNP_IP_Service	Service Class

0x1300	ESDP_UPNP_IP_PAN	Service Class
0x1301	ESDP_UPNP_IP_LAP	Service Class
0x1302	ESDP_UPNP_L2CAP	Service Class
0x1303	VideoSource	Service Class
0x1304	VideoSink	Service Class
0x1305	VideoDistribution	Profile
0x1400	HDP	Profile
0x1401	HDP Source	Service Class
0x1402	HDP Sink	Service Class

3.4 GATT Services

See Bluetooth Core Specification [Vol 3] Part G, Section 3.3.1 [4].

3.4.1 Services by Name

Last Modified: 2023-11-14

Filename: assigned_numbers/uuids/service_uuids.yaml

Service Name	UUID
Alert Notification service	0x1811
Audio Input Control service	0x1843
Audio Stream Control service	0x184E
Authorization Control service	0x183D
Automation IO service	0x1815
Basic Audio Announcement service	0x1851
Battery service	0x180F
Binary Sensor service	0x183B
Blood Pressure service	0x1810
Body Composition service	0x181B
Bond Management service	0x181E
Broadcast Audio Announcement service	0x1852
Broadcast Audio Scan service	0x184F
Common Audio service	0x1853
Constant Tone Extension service	0x184A
Continuous Glucose Monitoring service	0x181F
Coordinated Set Identification service	0x1846
Current Time service	0x1805
Cycling Power service	0x1818
Cycling Speed and Cadence service	0x1816
Device Information service	0x180A
Device Time service	0x1847
Elapsed Time service	0x183F
Electronic Shelf Label service	0x1857
Emergency Configuration service	0x183C
Environmental Sensing service	0x181A
Fitness Machine service	0x1826
Gaming Audio service	0x1858

Generic Access service	0x1800
Generic Attribute service	0x1801
Generic Health Sensor service	0x1840
Generic Media Control service	0x1849
Generic Telephone Bearer service	0x184C
Glucose service	0x1808
Health Thermometer service	0x1809
Hearing Access service	0x1854
Heart Rate service	0x180D
HTTP Proxy service	0x1823
Human Interface Device service	0x1812
Immediate Alert service	0x1802
Indoor Positioning service	0x1821
Insulin Delivery service	0x183A
Internet Protocol Support service	0x1820
Link Loss service	0x1803
Location and Navigation service	0x1819
Media Control service	0x1848
Mesh Provisioning service	0x1827
Mesh Proxy service	0x1828
Mesh Proxy Solicitation service	0x1859
Microphone Control service	0x184D
Next DST Change service	0x1807
Object Transfer service	0x1825
Phone Alert Status service	0x180E
Physical Activity Monitor service	0x183E
Public Broadcast Announcement service	0x1856
Published Audio Capabilities service	0x1850
Pulse Oximeter service	0x1822
Reconnection Configuration service	0x1829
Reference Time Update service	0x1806
Running Speed and Cadence service	0x1814
Scan Parameters service	0x1813
Telephone Bearer service	0x184B
Telephony and Media Audio service	0x1855
Transport Discovery service	0x1824

Tx Power service	0x1804
User Data service	0x181C
Volume Control service	0x1844
Volume Offset Control service	0x1845
Weight Scale service	0x181D

3.4.2 Services by UUID

Last Modified: 2023-11-14

Filename: assigned_numbers/uuids/service_uuids.yaml

UUID	Service Name
0x1800	Generic Access service
0x1801	Generic Attribute service
0x1802	Immediate Alert service
0x1803	Link Loss service
0x1804	Tx Power service
0x1805	Current Time service
0x1806	Reference Time Update service
0x1807	Next DST Change service
0x1808	Glucose service
0x1809	Health Thermometer service
0x180A	Device Information service
0x180D	Heart Rate service
0x180E	Phone Alert Status service
0x180F	Battery service
0x1810	Blood Pressure service
0x1811	Alert Notification service
0x1812	Human Interface Device service
0x1813	Scan Parameters service
0x1814	Running Speed and Cadence service
0x1815	Automation IO service
0x1816	Cycling Speed and Cadence service
0x1818	Cycling Power service
0x1819	Location and Navigation service
0x181A	Environmental Sensing service
0x181B	Body Composition service
0x181C	User Data service
0x181D	Weight Scale service
0x181E	Bond Management service
0x181F	Continuous Glucose Monitoring service
0x1820	Internet Protocol Support service
0x1821	Indoor Positioning service

0x1822	Pulse Oximeter service
0x1823	HTTP Proxy service
0x1824	Transport Discovery service
0x1825	Object Transfer service
0x1826	Fitness Machine service
0x1827	Mesh Provisioning service
0x1828	Mesh Proxy service
0x1829	Reconnection Configuration service
0x183A	Insulin Delivery service
0x183B	Binary Sensor service
0x183C	Emergency Configuration service
0x183D	Authorization Control service
0x183E	Physical Activity Monitor service
0x183F	Elapsed Time service
0x1840	Generic Health Sensor service
0x1843	Audio Input Control service
0x1844	Volume Control service
0x1845	Volume Offset Control service
0x1846	Coordinated Set Identification service
0x1847	Device Time service
0x1848	Media Control service
0x1849	Generic Media Control service
0x184A	Constant Tone Extension service
0x184B	Telephone Bearer service
0x184C	Generic Telephone Bearer service
0x184D	Microphone Control service
0x184E	Audio Stream Control service
0x184F	Broadcast Audio Scan service
0x1850	Published Audio Capabilities service
0x1851	Basic Audio Announcement service
0x1852	Broadcast Audio Announcement service
0x1853	Common Audio service
0x1854	Hearing Access service
0x1855	Telephony and Media Audio service
0x1856	Public Broadcast Announcement service
0x1857	Electronic Shelf Label service

| 0x1858 | Gaming Audio service |
| 0x1859 | Mesh Proxy Solicitation service |

3.5   Units

Referenced from Bluetooth Core Specification [Vol 3] Part G, Section 3.3.3.5.4 [4].

3.5.1   Units by Name

Last Modified: 2023-02-02

Filename: assigned_numbers/uuids/units.yaml

Unit Name	UUID
absorbed dose (gray)	0x2733
absorbed dose rate (gray per second)	0x2754
acceleration (metres per second squared)	0x2713
activity referred to a radionuclide (becquerel)	0x2732
amount concentration (mole per cubic metre)	0x271A
amount of substance (mole)	0x2706
angular acceleration (radian per second squared)	0x2744
angular velocity (radian per second)	0x2743
angular velocity (revolution per minute)	0x27A8
area (barn)	0x2784
area (hectare)	0x2766
area (square metres)	0x2710
capacitance (farad)	0x2729
catalytic activity (katal)	0x2735
catalytic activity concentration (katal per cubic metre)	0x2757
Celsius temperature (degree Celsius)	0x272F
concentration (count per cubic metre)	0x27B5
current density (ampere per square metre)	0x2718
density (kilogram per cubic metre)	0x2715
dose equivalent (sievert)	0x2734
dynamic viscosity (pascal second)	0x2740
electric charge (ampere hours)	0x27B0
electric charge (coulomb)	0x2727
electric charge density (coulomb per cubic metre)	0x274C
electric conductance (siemens)	0x272B
electric current (ampere)	0x2704
electric field strength (volt per metre)	0x274B
electric flux density (coulomb per square metre)	0x274E

electric potential difference (volt)	0x2728
electric resistance (ohm)	0x272A
Electrical Apparent Energy (kilovolt ampere hour)	0x27C7
Electrical Apparent Power (volt ampere)	0x27C8
energy (gram calorie)	0x27A9
energy (joule)	0x2725
energy (kilogram calorie)	0x27AA
energy (kilowatt hour)	0x27AB
energy density (joule per cubic metre)	0x274A
exposure (coulomb per kilogram)	0x2753
force (newton)	0x2723
frequency (hertz)	0x2722
heat capacity (joule per kelvin)	0x2746
heat flux density (watt per square metre)	0x2745
illuminance (lux)	0x2731
inductance (henry)	0x272E
irradiance (watt per square metre)	0x27B6
length (foot)	0x27A3
length (inch)	0x27A2
length (metre)	0x2701
length (mile)	0x27A4
length (nautical mile)	0x2783
length (parsec)	0x27A1
length (yard)	0x27A0
length (ångström)	0x2782
logarithmic radio quantity (bel)	0x2787
logarithmic radio quantity (neper)	0x2786
luminance (candela per square metre)	0x271C
luminous efficacy (lumen per watt)	0x27BE
luminous energy (lumen hour)	0x27BF
luminous exposure (lux hour)	0x27C0
luminous flux (lumen)	0x2730
luminous intensity (candela)	0x2707
magnetic field strength (ampere per metre)	0x2719
magnetic flux (weber)	0x272C
magnetic flux density (tesla)	0x272D

mass (kilogram)	0x2702
mass (pound)	0x27B8
mass (tonne)	0x2768
mass concentration (kilogram per cubic metre)	0x271B
mass density (milligram per decilitre)	0x27B1
mass density (millimole per litre)	0x27B2
mass density rate ((milligram per decilitre) per minute)	0x27C6
mass flow (gram per second)	0x27C1
metabolic equivalent	0x27B9
milliliter (per kilogram per minute)	0x27B7
molar energy (joule per mole)	0x2751
molar entropy (joule per mole kelvin)	0x2752
moment of force (newton metre)	0x2741
pace (kilometre per minute)	0x27BD
parts per billion	0x27C5
parts per million	0x27C4
per mille	0x27AE
percentage	0x27AD
period (beats per minute)	0x27AF
permeability (henry per metre)	0x2750
permittivity (farad per metre)	0x274F
plane angle (degree)	0x2763
plane angle (minute)	0x2764
plane angle (radian)	0x2720
plane angle (second)	0x2765
power (watt)	0x2726
pressure (bar)	0x2780
pressure (millimetre of mercury)	0x2781
pressure (pascal)	0x2724
pressure (pound-force per square inch)	0x27A5
radiance (watt per square metre steradian)	0x2756
radiant intensity (watt per steradian)	0x2755
refractive index	0x271D
relative permeability	0x271E
solid angle (steradian)	0x2721
sound pressure (decibel)	0x27C3

specific energy (joule per kilogram)	0x2748
specific heat capacity (joule per kilogram kelvin)	0x2747
specific volume (cubic metre per kilogram)	0x2717
step (per minute)	0x27BA
stroke (per minute)	0x27BC
surface charge density (coulomb per square metre)	0x274D
surface density (kilogram per square metre)	0x2716
surface tension (newton per metre)	0x2742
thermal conductivity (watt per metre kelvin)	0x2749
thermodynamic temperature (degree Fahrenheit)	0x27AC
thermodynamic temperature (kelvin)	0x2705
time (day)	0x2762
time (hour)	0x2761
time (minute)	0x2760
time (month)	0x27B4
time (second)	0x2703
time (year)	0x27B3
unitless	0x2700
velocity (kilometre per hour)	0x27A6
velocity (knot)	0x2785
velocity (metres per second)	0x2712
velocity (mile per hour)	0x27A7
volume (cubic metres)	0x2711
volume (litre)	0x2767
volume flow (litre per second)	0x27C2
wavenumber (reciprocal metre)	0x2714

3.5.2 Units by UUID

Last Modified: 2023-02-02

Filename: assigned_numbers/uuids/units.yaml

UUID	Unit Name
0x2700	unitless
0x2701	length (metre)
0x2702	mass (kilogram)
0x2703	time (second)
0x2704	electric current (ampere)
0x2705	thermodynamic temperature (kelvin)
0x2706	amount of substance (mole)
0x2707	luminous intensity (candela)
0x2710	area (square metres)
0x2711	volume (cubic metres)
0x2712	velocity (metres per second)
0x2713	acceleration (metres per second squared)
0x2714	wavenumber (reciprocal metre)
0x2715	density (kilogram per cubic metre)
0x2716	surface density (kilogram per square metre)
0x2717	specific volume (cubic metre per kilogram)
0x2718	current density (ampere per square metre)
0x2719	magnetic field strength (ampere per metre)
0x271A	amount concentration (mole per cubic metre)
0x271B	mass concentration (kilogram per cubic metre)
0x271C	luminance (candela per square metre)
0x271D	refractive index
0x271E	relative permeability
0x2720	plane angle (radian)
0x2721	solid angle (steradian)
0x2722	frequency (hertz)
0x2723	force (newton)
0x2724	pressure (pascal)
0x2725	energy (joule)
0x2726	power (watt)
0x2727	electric charge (coulomb)

0x2728	electric potential difference (volt)
0x2729	capacitance (farad)
0x272A	electric resistance (ohm)
0x272B	electric conductance (siemens)
0x272C	magnetic flux (weber)
0x272D	magnetic flux density (tesla)
0x272E	inductance (henry)
0x272F	Celsius temperature (degree Celsius)
0x2730	luminous flux (lumen)
0x2731	illuminance (lux)
0x2732	activity referred to a radionuclide (becquerel)
0x2733	absorbed dose (gray)
0x2734	dose equivalent (sievert)
0x2735	catalytic activity (katal)
0x2740	dynamic viscosity (pascal second)
0x2741	moment of force (newton metre)
0x2742	surface tension (newton per metre)
0x2743	angular velocity (radian per second)
0x2744	angular acceleration (radian per second squared)
0x2745	heat flux density (watt per square metre)
0x2746	heat capacity (joule per kelvin)
0x2747	specific heat capacity (joule per kilogram kelvin)
0x2748	specific energy (joule per kilogram)
0x2749	thermal conductivity (watt per metre kelvin)
0x274A	energy density (joule per cubic metre)
0x274B	electric field strength (volt per metre)
0x274C	electric charge density (coulomb per cubic metre)
0x274D	surface charge density (coulomb per square metre)
0x274E	electric flux density (coulomb per square metre)
0x274F	permittivity (farad per metre)
0x2750	permeability (henry per metre)
0x2751	molar energy (joule per mole)
0x2752	molar entropy (joule per mole kelvin)
0x2753	exposure (coulomb per kilogram)
0x2754	absorbed dose rate (gray per second)
0x2755	radiant intensity (watt per steradian)

0x2756	radiance (watt per square metre steradian)
0x2757	catalytic activity concentration (katal per cubic metre)
0x2760	time (minute)
0x2761	time (hour)
0x2762	time (day)
0x2763	plane angle (degree)
0x2764	plane angle (minute)
0x2765	plane angle (second)
0x2766	area (hectare)
0x2767	volume (litre)
0x2768	mass (tonne)
0x2780	pressure (bar)
0x2781	pressure (millimetre of mercury)
0x2782	length (ångström)
0x2783	length (nautical mile)
0x2784	area (barn)
0x2785	velocity (knot)
0x2786	logarithmic radio quantity (neper)
0x2787	logarithmic radio quantity (bel)
0x27A0	length (yard)
0x27A1	length (parsec)
0x27A2	length (inch)
0x27A3	length (foot)
0x27A4	length (mile)
0x27A5	pressure (pound-force per square inch)
0x27A6	velocity (kilometre per hour)
0x27A7	velocity (mile per hour)
0x27A8	angular velocity (revolution per minute)
0x27A9	energy (gram calorie)
0x27AA	energy (kilogram calorie)
0x27AB	energy (kilowatt hour)
0x27AC	thermodynamic temperature (degree Fahrenheit)
0x27AD	percentage
0x27AE	per mille
0x27AF	period (beats per minute)
0x27B0	electric charge (ampere hours)

`0x27B1`	mass density (milligram per decilitre)	
`0x27B2`	mass density (millimole per litre)	
`0x27B3`	time (year)	
`0x27B4`	time (month)	
`0x27B5`	concentration (count per cubic metre)	
`0x27B6`	irradiance (watt per square metre)	
`0x27B7`	milliliter (per kilogram per minute)	
`0x27B8`	mass (pound)	
`0x27B9`	metabolic equivalent	
`0x27BA`	step (per minute)	
`0x27BC`	stroke (per minute)	
`0x27BD`	pace (kilometre per minute)	
`0x27BE`	luminous efficacy (lumen per watt)	
`0x27BF`	luminous energy (lumen hour)	
`0x27C0`	luminous exposure (lux hour)	
`0x27C1`	mass flow (gram per second)	
`0x27C2`	volume flow (litre per second)	
`0x27C3`	sound pressure (decibel)	
`0x27C4`	parts per million	
`0x27C5`	parts per billion	
`0x27C6`	mass density rate ((milligram per decilitre) per minute)	
`0x27C7`	Electrical Apparent Energy (kilovolt ampere hour)	
`0x27C8`	Electrical Apparent Power (volt ampere)	

3.6   Declarations

See Bluetooth Core Specification [Vol 3] Part G, Section 3.1 [4].

Last Modified: 2023-02-02

Filename: assigned_numbers/uuids/declarations.yaml

UUID	Declaration Name
0x2800	Primary Service
0x2801	Secondary Service
0x2802	Include
0x2803	Characteristic

3.7 Descriptors

Referenced from Bluetooth Core Specification [Vol 3] Part F, Section 2 [4].

See Bluetooth Core Specification [Vol 3] Part G, Section 3.3.3 [4].

Last Modified: 2023-08-08

Filename: assigned_numbers/uuids/descriptors.yaml

UUID	Descriptor Name
0x2900	Characteristic Extended Properties
0x2901	Characteristic User Description
0x2902	Client Characteristic Configuration
0x2903	Server Characteristic Configuration
0x2904	Characteristic Presentation Format
0x2905	Characteristic Aggregate Format
0x2906	Valid Range
0x2907	External Report Reference
0x2908	Report Reference
0x2909	Number of Digitals
0x290A	Value Trigger Setting
0x290B	Environmental Sensing Configuration
0x290C	Environmental Sensing Measurement
0x290D	Environmental Sensing Trigger Setting
0x290E	Time Trigger Setting
0x290F	Complete BR-EDR Transport Block Data
0x2910	Observation Schedule
0x2911	Valid Range and Accuracy

3.8   Characteristics

Referenced from the following:

- Bluetooth Core Specification [Vol 3] Part C, Section 12 [4].
- Bluetooth Core Specification [Vol 3] Part F, Section 2 [4].

See Bluetooth Core Specification [Vol 3] Part G, Section 3.3 [4].

3.8.1   Characteristics by Name

Last Modified: 2023-11-14

Filename: assigned_numbers/uuids/characteristic_uuids.yaml

Characteristic Name	UUID
ACS Control Point	0x2B33
ACS Data In	0x2B30
ACS Data Out Indicate	0x2B32
ACS Data Out Notify	0x2B31
ACS Status	0x2B2F
Active Preset Index	0x2BDC
Activity Current Session	0x2B44
Activity Goal	0x2B4E
Advertising Constant Tone Extension Interval	0x2BB1
Advertising Constant Tone Extension Minimum Length	0x2BAE
Advertising Constant Tone Extension Minimum Transmit Count	0x2BAF
Advertising Constant Tone Extension PHY	0x2BB2
Advertising Constant Tone Extension Transmit Duration	0x2BB0
Aerobic Heart Rate Lower Limit	0x2A7E
Aerobic Heart Rate Upper Limit	0x2A84
Aerobic Threshold	0x2A7F
Age	0x2A80
Aggregate	0x2A5A
Alert Category ID	0x2A43
Alert Category ID Bit Mask	0x2A42
Alert Level	0x2A06
Alert Notification Control Point	0x2A44
Alert Status	0x2A3F
Altitude	0x2AB3
Ammonia Concentration	0x2BCF

Anaerobic Heart Rate Lower Limit	0x2A81
Anaerobic Heart Rate Upper Limit	0x2A82
Anaerobic Threshold	0x2A83
AP Sync Key Material	0x2BF7
Apparent Energy 32	0x2B89
Apparent Power	0x2B8A
Apparent Wind Direction	0x2A73
Apparent Wind Speed	0x2A72
Appearance	0x2A01
ASE Control Point	0x2BC6
Audio Input Control Point	0x2B7B
Audio Input Description	0x2B7C
Audio Input State	0x2B77
Audio Input Status	0x2B7A
Audio Input Type	0x2B79
Audio Location	0x2B81
Audio Output Description	0x2B83
Available Audio Contexts	0x2BCD
Average Current	0x2AE0
Average Voltage	0x2AE1
Barometric Pressure Trend	0x2AA3
Battery Critical Status	0x2BE9
Battery Energy Status	0x2BF0
Battery Health Information	0x2BEB
Battery Health Status	0x2BEA
Battery Information	0x2BEC
Battery Level	0x2A19
Battery Level Status	0x2BED
Battery Time Status	0x2BEE
Bearer List Current Calls	0x2BB9
Bearer Provider Name	0x2BB3
Bearer Signal Strength	0x2BB7
Bearer Signal Strength Reporting Interval	0x2BB8
Bearer Technology	0x2BB5
Bearer UCI	0x2BB4
Bearer URI Schemes Supported List	0x2BB6

BGR Features	0x2C04
BGS Features	0x2C03
Blood Pressure Feature	0x2A49
Blood Pressure Measurement	0x2A35
Blood Pressure Record	0x2B36
Bluetooth SIG Data	0x2B39
Body Composition Feature	0x2A9B
Body Composition Measurement	0x2A9C
Body Sensor Location	0x2A38
Bond Management Control Point	0x2AA4
Bond Management Feature	0x2AA5
Boolean	0x2AE2
Boot Keyboard Input Report	0x2A22
Boot Keyboard Output Report	0x2A32
Boot Mouse Input Report	0x2A33
BR-EDR Handover Data	0x2B38
Broadcast Audio Scan Control Point	0x2BC7
Broadcast Receive State	0x2BC8
BSS Control Point	0x2B2B
BSS Response	0x2B2C
Call Control Point	0x2BBE
Call Control Point Optional Opcodes	0x2BBF
Call Friendly Name	0x2BC2
Call State	0x2BBD
Caloric Intake	0x2B50
Carbon Monoxide Concentration	0x2BD0
CardioRespiratory Activity Instantaneous Data	0x2B3E
CardioRespiratory Activity Summary Data	0x2B3F
Central Address Resolution	0x2AA6
CGM Feature	0x2AA8
CGM Measurement	0x2AA7
CGM Session Run Time	0x2AAB
CGM Session Start Time	0x2AAA
CGM Specific Ops Control Point	0x2AAC
CGM Status	0x2AA9
Chromatic Distance from Planckian	0x2AE3

Chromaticity Coordinate	0x2B1C
Chromaticity Coordinates	0x2AE4
Chromaticity in CCT and Duv Values	0x2AE5
Chromaticity Tolerance	0x2AE6
CIE 13.3-1995 Color Rendering Index	0x2AE7
Client Supported Features	0x2B29
CO\{}textsubscript{2} Concentration	0x2B8C
Coefficient	0x2AE8
Constant Tone Extension Enable	0x2BAD
Content Control ID	0x2BBA
Coordinated Set Size	0x2B85
Correlated Color Temperature	0x2AE9
Cosine of the Angle	0x2B8D
Count 16	0x2AEA
Count 24	0x2AEB
Country Code	0x2AEC
Cross Trainer Data	0x2ACE
CSC Feature	0x2A5C
CSC Measurement	0x2A5B
Current Elapsed Time	0x2BF2
Current Group Object ID	0x2BA0
Current Time	0x2A2B
Current Track Object ID	0x2B9D
Current Track Segments Object ID	0x2B9C
Cycling Power Control Point	0x2A66
Cycling Power Feature	0x2A65
Cycling Power Measurement	0x2A63
Cycling Power Vector	0x2A64
Database Change Increment	0x2A99
Database Hash	0x2B2A
Date of Birth	0x2A85
Date of Threshold Assessment	0x2A86
Date Time	0x2A08
Date UTC	0x2AED
Day Date Time	0x2A0A
Day of Week	0x2A09

Descriptor Value Changed	0x2A7D
Device Name	0x2A00
Device Time	0x2B90
Device Time Control Point	0x2B91
Device Time Feature	0x2B8E
Device Time Parameters	0x2B8F
Device Wearing Position	0x2B4B
Dew Point	0x2A7B
DST Offset	0x2A0D
Electric Current	0x2AEE
Electric Current Range	0x2AEF
Electric Current Specification	0x2AF0
Electric Current Statistics	0x2AF1
Elevation	0x2A6C
Email Address	0x2A87
Emergency ID	0x2B2D
Emergency Text	0x2B2E
Encrypted Data Key Material	0x2B88
Energy	0x2AF2
Energy 32	0x2BA8
Energy in a Period of Day	0x2AF3
Enhanced Blood Pressure Measurement	0x2B34
Enhanced Intermediate Cuff Pressure	0x2B35
ESL Address	0x2BF6
ESL Control Point	0x2BFE
ESL Current Absolute Time	0x2BF9
ESL Display Information	0x2BFA
ESL Image Information	0x2BFB
ESL LED Information	0x2BFD
ESL Response Key Material	0x2BF8
ESL Sensor Information	0x2BFC
Estimated Service Date	0x2BEF
Event Statistics	0x2AF4
Exact Time 256	0x2A0C
Fat Burn Heart Rate Lower Limit	0x2A88
Fat Burn Heart Rate Upper Limit	0x2A89

Firmware Revision String	0x2A26
First Name	0x2A8A
Fitness Machine Control Point	0x2AD9
Fitness Machine Feature	0x2ACC
Fitness Machine Status	0x2ADA
Five Zone Heart Rate Limits	0x2A8B
Fixed String 16	0x2AF5
Fixed String 24	0x2AF6
Fixed String 36	0x2AF7
Fixed String 64	0x2BDE
Fixed String 8	0x2AF8
Floor Number	0x2AB2
Four Zone Heart Rate Limits	0x2B4C
Gain Settings Attribute	0x2B78
Gender	0x2A8C
General Activity Instantaneous Data	0x2B3C
General Activity Summary Data	0x2B3D
Generic Level	0x2AF9
GHS Control Point	0x2BF4
Global Trade Item Number	0x2AFA
Glucose Feature	0x2A51
Glucose Measurement	0x2A18
Glucose Measurement Context	0x2A34
GMAP Role	0x2C00
Group Object Type	0x2BAC
Gust Factor	0x2A74
Handedness	0x2B4A
Hardware Revision String	0x2A27
Health Sensor Features	0x2BF3
Hearing Aid Features	0x2BDA
Hearing Aid Preset Control Point	0x2BDB
Heart Rate Control Point	0x2A39
Heart Rate Max	0x2A8D
Heart Rate Measurement	0x2A37
Heat Index	0x2A7A
Height	0x2A8E

HID Control Point	0x2A4C
HID Information	0x2A4A
High Intensity Exercise Threshold	0x2B4D
High Resolution Height	0x2B47
High Temperature	0x2BDF
High Voltage	0x2BE0
Hip Circumference	0x2A8F
HTTP Control Point	0x2ABA
HTTP Entity Body	0x2AB9
HTTP Headers	0x2AB7
HTTP Status Code	0x2AB8
HTTPS Security	0x2ABB
Humidity	0x2A6F
IDD Annunciation Status	0x2B22
IDD Command Control Point	0x2B25
IDD Command Data	0x2B26
IDD Features	0x2B23
IDD History Data	0x2B28
IDD Record Access Control Point	0x2B27
IDD Status	0x2B21
IDD Status Changed	0x2B20
IDD Status Reader Control Point	0x2B24
IEEE 11073-20601 Regulatory Certification Data List	0x2A2A
Illuminance	0x2AFB
Incoming Call	0x2BC1
Incoming Call Target Bearer URI	0x2BBC
Indoor Bike Data	0x2AD2
Indoor Positioning Configuration	0x2AAD
Intermediate Cuff Pressure	0x2A36
Intermediate Temperature	0x2A1E
Irradiance	0x2A77
Language	0x2AA2
Last Name	0x2A90
Latitude	0x2AAE
LE GATT Security Levels	0x2BF5
Light Distribution	0x2BE1

Light Output	0x2BE2
Light Source Type	0x2BE3
Live Health Observations	0x2B8B
LN Control Point	0x2A6B
LN Feature	0x2A6A
Local East Coordinate	0x2AB1
Local North Coordinate	0x2AB0
Local Time Information	0x2A0F
Location and Speed	0x2A67
Location Name	0x2AB5
Longitude	0x2AAF
Luminous Efficacy	0x2AFC
Luminous Energy	0x2AFD
Luminous Exposure	0x2AFE
Luminous Flux	0x2AFF
Luminous Flux Range	0x2B00
Luminous Intensity	0x2B01
Magnetic Declination	0x2A2C
Magnetic Flux Density - 2D	0x2AA0
Magnetic Flux Density - 3D	0x2AA1
Manufacturer Name String	0x2A29
Mass Flow	0x2B02
Maximum Recommended Heart Rate	0x2A91
Measurement Interval	0x2A21
Media Control Point	0x2BA4
Media Control Point Opcodes Supported	0x2BA5
Media Player Icon Object ID	0x2B94
Media Player Icon Object Type	0x2BA9
Media Player Icon URL	0x2B95
Media Player Name	0x2B93
Media State	0x2BA3
Mesh Provisioning Data In	0x2ADB
Mesh Provisioning Data Out	0x2ADC
Mesh Proxy Data In	0x2ADD
Mesh Proxy Data Out	0x2ADE
Methane Concentration	0x2BD1

Middle Name	0x2B48
Model Number String	0x2A24
Mute	0x2BC3
Navigation	0x2A68
New Alert	0x2A46
Next Track Object ID	0x2B9E
Nitrogen Dioxide Concentration	0x2BD2
Noise	0x2BE4
Non-Methane Volatile Organic Compounds Concentration	0x2BD3
Object Action Control Point	0x2AC5
Object Changed	0x2AC8
Object First-Created	0x2AC1
Object ID	0x2AC3
Object Last-Modified	0x2AC2
Object List Control Point	0x2AC6
Object List Filter	0x2AC7
Object Name	0x2ABE
Object Properties	0x2AC4
Object Size	0x2AC0
Object Type	0x2ABF
Observation Schedule Changed	0x2BF1
OTS Feature	0x2ABD
Ozone Concentration	0x2BD4
Parent Group Object ID	0x2B9F
Particulate Matter - PM1 Concentration	0x2BD5
Particulate Matter - PM10 Concentration	0x2BD7
Particulate Matter - PM2.5 Concentration	0x2BD6
Perceived Lightness	0x2B03
Percentage 8	0x2B04
Peripheral Preferred Connection Parameters	0x2A04
Peripheral Privacy Flag	0x2A02
Physical Activity Monitor Control Point	0x2B43
Physical Activity Monitor Features	0x2B3B
Physical Activity Session Descriptor	0x2B45
Playback Speed	0x2B9A
Playing Order	0x2BA1

Playing Orders Supported	0x2BA2
PLX Continuous Measurement	0x2A5F
PLX Features	0x2A60
PLX Spot-Check Measurement	0x2A5E
PnP ID	0x2A50
Pollen Concentration	0x2A75
Position Quality	0x2A69
Power	0x2B05
Power Specification	0x2B06
Preferred Units	0x2B46
Pressure	0x2A6D
Protocol Mode	0x2A4E
Rainfall	0x2A78
RC Feature	0x2B1D
RC Settings	0x2B1E
Reconnection Address	0x2A03
Reconnection Configuration Control Point	0x2B1F
Record Access Control Point	0x2A52
Reference Time Information	0x2A14
Registered User	0x2B37
Relative Runtime in a Correlated Color Temperature Range	0x2BE5
Relative Runtime in a Current Range	0x2B07
Relative Runtime in a Generic Level Range	0x2B08
Relative Value in a Period of Day	0x2B0B
Relative Value in a Temperature Range	0x2B0C
Relative Value in a Voltage Range	0x2B09
Relative Value in an Illuminance Range	0x2B0A
Report	0x2A4D
Report Map	0x2A4B
Resolvable Private Address Only	0x2AC9
Resting Heart Rate	0x2A92
Ringer Control Point	0x2A40
Ringer Setting	0x2A41
Rower Data	0x2AD1
RSC Feature	0x2A54
RSC Measurement	0x2A53

SC Control Point	0x2A55
Scan Interval Window	0x2A4F
Scan Refresh	0x2A31
Search Control Point	0x2BA7
Search Results Object ID	0x2BA6
Sedentary Interval Notification	0x2B4F
Seeking Speed	0x2B9B
Sensor Location	0x2A5D
Serial Number String	0x2A25
Server Supported Features	0x2B3A
Service Changed	0x2A05
Set Identity Resolving Key	0x2B84
Set Member Lock	0x2B86
Set Member Rank	0x2B87
Sink ASE	0x2BC4
Sink Audio Locations	0x2BCA
Sink PAC	0x2BC9
Sleep Activity Instantaneous Data	0x2B41
Sleep Activity Summary Data	0x2B42
Software Revision String	0x2A28
Source ASE	0x2BC5
Source Audio Locations	0x2BCC
Source PAC	0x2BCB
Sport Type for Aerobic and Anaerobic Thresholds	0x2A93
Stair Climber Data	0x2AD0
Status Flags	0x2BBB
Step Climber Data	0x2ACF
Step Counter Activity Summary Data	0x2B40
Stored Health Observations	0x2BDD
Stride Length	0x2B49
Sulfur Dioxide Concentration	0x2BD8
Sulfur Hexafluoride Concentration	0x2BD9
Supported Audio Contexts	0x2BCE
Supported Heart Rate Range	0x2AD7
Supported Inclination Range	0x2AD5
Supported New Alert Category	0x2A47

Supported Power Range	0x2AD8
Supported Resistance Level Range	0x2AD6
Supported Speed Range	0x2AD4
Supported Unread Alert Category	0x2A48
System ID	0x2A23
TDS Control Point	0x2ABC
Temperature	0x2A6E
Temperature 8	0x2B0D
Temperature 8 in a Period of Day	0x2B0E
Temperature 8 Statistics	0x2B0F
Temperature Measurement	0x2A1C
Temperature Range	0x2B10
Temperature Statistics	0x2B11
Temperature Type	0x2A1D
Termination Reason	0x2BC0
Three Zone Heart Rate Limits	0x2A94
Time Accuracy	0x2A12
Time Change Log Data	0x2B92
Time Decihour 8	0x2B12
Time Exponential 8	0x2B13
Time Hour 24	0x2B14
Time Millisecond 24	0x2B15
Time Second 16	0x2B16
Time Second 32	0x2BE6
Time Second 8	0x2B17
Time Source	0x2A13
Time Update Control Point	0x2A16
Time Update State	0x2A17
Time with DST	0x2A11
Time Zone	0x2A0E
TMAP Role	0x2B51
Track Changed	0x2B96
Track Duration	0x2B98
Track Object Type	0x2BAB
Track Position	0x2B99
Track Segments Object Type	0x2BAA

Track Title	0x2B97
Training Status	0x2AD3
Treadmill Data	0x2ACD
True Wind Direction	0x2A71
True Wind Speed	0x2A70
Two Zone Heart Rate Limits	0x2A95
Tx Power Level	0x2A07
UDI for Medical Devices	0x2BFF
UGG Features	0x2C01
UGT Features	0x2C02
Uncertainty	0x2AB4
Unread Alert Status	0x2A45
URI	0x2AB6
User Control Point	0x2A9F
User Index	0x2A9A
UV Index	0x2A76
VO2 Max	0x2A96
VOC Concentration	0x2BE7
Voltage	0x2B18
Voltage Frequency	0x2BE8
Voltage Specification	0x2B19
Voltage Statistics	0x2B1A
Volume Control Point	0x2B7E
Volume Flags	0x2B7F
Volume Flow	0x2B1B
Volume Offset Control Point	0x2B82
Volume Offset State	0x2B80
Volume State	0x2B7D
Waist Circumference	0x2A97
Weight	0x2A98
Weight Measurement	0x2A9D
Weight Scale Feature	0x2A9E
Wind Chill	0x2A79

3.8.2 Characteristics by UUID

Last Modified: 2023-11-14

Filename: assigned_numbers/uuids/characteristic_uuids.yaml

UUID	Characteristic Name
0x2A00	Device Name
0x2A01	Appearance
0x2A02	Peripheral Privacy Flag
0x2A03	Reconnection Address
0x2A04	Peripheral Preferred Connection Parameters
0x2A05	Service Changed
0x2A06	Alert Level
0x2A07	Tx Power Level
0x2A08	Date Time
0x2A09	Day of Week
0x2A0A	Day Date Time
0x2A0C	Exact Time 256
0x2A0D	DST Offset
0x2A0E	Time Zone
0x2A0F	Local Time Information
0x2A11	Time with DST
0x2A12	Time Accuracy
0x2A13	Time Source
0x2A14	Reference Time Information
0x2A16	Time Update Control Point
0x2A17	Time Update State
0x2A18	Glucose Measurement
0x2A19	Battery Level
0x2A1C	Temperature Measurement
0x2A1D	Temperature Type
0x2A1E	Intermediate Temperature
0x2A21	Measurement Interval
0x2A22	Boot Keyboard Input Report
0x2A23	System ID
0x2A24	Model Number String
0x2A25	Serial Number String

0x2A26	Firmware Revision String
0x2A27	Hardware Revision String
0x2A28	Software Revision String
0x2A29	Manufacturer Name String
0x2A2A	IEEE 11073-20601 Regulatory Certification Data List
0x2A2B	Current Time
0x2A2C	Magnetic Declination
0x2A31	Scan Refresh
0x2A32	Boot Keyboard Output Report
0x2A33	Boot Mouse Input Report
0x2A34	Glucose Measurement Context
0x2A35	Blood Pressure Measurement
0x2A36	Intermediate Cuff Pressure
0x2A37	Heart Rate Measurement
0x2A38	Body Sensor Location
0x2A39	Heart Rate Control Point
0x2A3F	Alert Status
0x2A40	Ringer Control Point
0x2A41	Ringer Setting
0x2A42	Alert Category ID Bit Mask
0x2A43	Alert Category ID
0x2A44	Alert Notification Control Point
0x2A45	Unread Alert Status
0x2A46	New Alert
0x2A47	Supported New Alert Category
0x2A48	Supported Unread Alert Category
0x2A49	Blood Pressure Feature
0x2A4A	HID Information
0x2A4B	Report Map
0x2A4C	HID Control Point
0x2A4D	Report
0x2A4E	Protocol Mode
0x2A4F	Scan Interval Window
0x2A50	PnP ID
0x2A51	Glucose Feature
0x2A52	Record Access Control Point

0x2A53	RSC Measurement
0x2A54	RSC Feature
0x2A55	SC Control Point
0x2A5A	Aggregate
0x2A5B	CSC Measurement
0x2A5C	CSC Feature
0x2A5D	Sensor Location
0x2A5E	PLX Spot-Check Measurement
0x2A5F	PLX Continuous Measurement
0x2A60	PLX Features
0x2A63	Cycling Power Measurement
0x2A64	Cycling Power Vector
0x2A65	Cycling Power Feature
0x2A66	Cycling Power Control Point
0x2A67	Location and Speed
0x2A68	Navigation
0x2A69	Position Quality
0x2A6A	LN Feature
0x2A6B	LN Control Point
0x2A6C	Elevation
0x2A6D	Pressure
0x2A6E	Temperature
0x2A6F	Humidity
0x2A70	True Wind Speed
0x2A71	True Wind Direction
0x2A72	Apparent Wind Speed
0x2A73	Apparent Wind Direction
0x2A74	Gust Factor
0x2A75	Pollen Concentration
0x2A76	UV Index
0x2A77	Irradiance
0x2A78	Rainfall
0x2A79	Wind Chill
0x2A7A	Heat Index
0x2A7B	Dew Point
0x2A7D	Descriptor Value Changed

0x2A7E	Aerobic Heart Rate Lower Limit
0x2A7F	Aerobic Threshold
0x2A80	Age
0x2A81	Anaerobic Heart Rate Lower Limit
0x2A82	Anaerobic Heart Rate Upper Limit
0x2A83	Anaerobic Threshold
0x2A84	Aerobic Heart Rate Upper Limit
0x2A85	Date of Birth
0x2A86	Date of Threshold Assessment
0x2A87	Email Address
0x2A88	Fat Burn Heart Rate Lower Limit
0x2A89	Fat Burn Heart Rate Upper Limit
0x2A8A	First Name
0x2A8B	Five Zone Heart Rate Limits
0x2A8C	Gender
0x2A8D	Heart Rate Max
0x2A8E	Height
0x2A8F	Hip Circumference
0x2A90	Last Name
0x2A91	Maximum Recommended Heart Rate
0x2A92	Resting Heart Rate
0x2A93	Sport Type for Aerobic and Anaerobic Thresholds
0x2A94	Three Zone Heart Rate Limits
0x2A95	Two Zone Heart Rate Limits
0x2A96	VO2 Max
0x2A97	Waist Circumference
0x2A98	Weight
0x2A99	Database Change Increment
0x2A9A	User Index
0x2A9B	Body Composition Feature
0x2A9C	Body Composition Measurement
0x2A9D	Weight Measurement
0x2A9E	Weight Scale Feature
0x2A9F	User Control Point
0x2AA0	Magnetic Flux Density - 2D
0x2AA1	Magnetic Flux Density - 3D

0x2AA2	Language
0x2AA3	Barometric Pressure Trend
0x2AA4	Bond Management Control Point
0x2AA5	Bond Management Feature
0x2AA6	Central Address Resolution
0x2AA7	CGM Measurement
0x2AA8	CGM Feature
0x2AA9	CGM Status
0x2AAA	CGM Session Start Time
0x2AAB	CGM Session Run Time
0x2AAC	CGM Specific Ops Control Point
0x2AAD	Indoor Positioning Configuration
0x2AAE	Latitude
0x2AAF	Longitude
0x2AB0	Local North Coordinate
0x2AB1	Local East Coordinate
0x2AB2	Floor Number
0x2AB3	Altitude
0x2AB4	Uncertainty
0x2AB5	Location Name
0x2AB6	URI
0x2AB7	HTTP Headers
0x2AB8	HTTP Status Code
0x2AB9	HTTP Entity Body
0x2ABA	HTTP Control Point
0x2ABB	HTTPS Security
0x2ABC	TDS Control Point
0x2ABD	OTS Feature
0x2ABE	Object Name
0x2ABF	Object Type
0x2AC0	Object Size
0x2AC1	Object First-Created
0x2AC2	Object Last-Modified
0x2AC3	Object ID
0x2AC4	Object Properties
0x2AC5	Object Action Control Point

0x2AC6	Object List Control Point
0x2AC7	Object List Filter
0x2AC8	Object Changed
0x2AC9	Resolvable Private Address Only
0x2ACC	Fitness Machine Feature
0x2ACD	Treadmill Data
0x2ACE	Cross Trainer Data
0x2ACF	Step Climber Data
0x2AD0	Stair Climber Data
0x2AD1	Rower Data
0x2AD2	Indoor Bike Data
0x2AD3	Training Status
0x2AD4	Supported Speed Range
0x2AD5	Supported Inclination Range
0x2AD6	Supported Resistance Level Range
0x2AD7	Supported Heart Rate Range
0x2AD8	Supported Power Range
0x2AD9	Fitness Machine Control Point
0x2ADA	Fitness Machine Status
0x2ADB	Mesh Provisioning Data In
0x2ADC	Mesh Provisioning Data Out
0x2ADD	Mesh Proxy Data In
0x2ADE	Mesh Proxy Data Out
0x2AE0	Average Current
0x2AE1	Average Voltage
0x2AE2	Boolean
0x2AE3	Chromatic Distance from Planckian
0x2AE4	Chromaticity Coordinates
0x2AE5	Chromaticity in CCT and Duv Values
0x2AE6	Chromaticity Tolerance
0x2AE7	CIE 13.3-1995 Color Rendering Index
0x2AE8	Coefficient
0x2AE9	Correlated Color Temperature
0x2AEA	Count 16
0x2AEB	Count 24
0x2AEC	Country Code

`0x2AED`	Date UTC
`0x2AEE`	Electric Current
`0x2AEF`	Electric Current Range
`0x2AF0`	Electric Current Specification
`0x2AF1`	Electric Current Statistics
`0x2AF2`	Energy
`0x2AF3`	Energy in a Period of Day
`0x2AF4`	Event Statistics
`0x2AF5`	Fixed String 16
`0x2AF6`	Fixed String 24
`0x2AF7`	Fixed String 36
`0x2AF8`	Fixed String 8
`0x2AF9`	Generic Level
`0x2AFA`	Global Trade Item Number
`0x2AFB`	Illuminance
`0x2AFC`	Luminous Efficacy
`0x2AFD`	Luminous Energy
`0x2AFE`	Luminous Exposure
`0x2AFF`	Luminous Flux
`0x2B00`	Luminous Flux Range
`0x2B01`	Luminous Intensity
`0x2B02`	Mass Flow
`0x2B03`	Perceived Lightness
`0x2B04`	Percentage 8
`0x2B05`	Power
`0x2B06`	Power Specification
`0x2B07`	Relative Runtime in a Current Range
`0x2B08`	Relative Runtime in a Generic Level Range
`0x2B09`	Relative Value in a Voltage Range
`0x2B0A`	Relative Value in an Illuminance Range
`0x2B0B`	Relative Value in a Period of Day
`0x2B0C`	Relative Value in a Temperature Range
`0x2B0D`	Temperature 8
`0x2B0E`	Temperature 8 in a Period of Day
`0x2B0F`	Temperature 8 Statistics
`0x2B10`	Temperature Range

`0x2B11`	Temperature Statistics
`0x2B12`	Time Decihour 8
`0x2B13`	Time Exponential 8
`0x2B14`	Time Hour 24
`0x2B15`	Time Millisecond 24
`0x2B16`	Time Second 16
`0x2B17`	Time Second 8
`0x2B18`	Voltage
`0x2B19`	Voltage Specification
`0x2B1A`	Voltage Statistics
`0x2B1B`	Volume Flow
`0x2B1C`	Chromaticity Coordinate
`0x2B1D`	RC Feature
`0x2B1E`	RC Settings
`0x2B1F`	Reconnection Configuration Control Point
`0x2B20`	IDD Status Changed
`0x2B21`	IDD Status
`0x2B22`	IDD Annunciation Status
`0x2B23`	IDD Features
`0x2B24`	IDD Status Reader Control Point
`0x2B25`	IDD Command Control Point
`0x2B26`	IDD Command Data
`0x2B27`	IDD Record Access Control Point
`0x2B28`	IDD History Data
`0x2B29`	Client Supported Features
`0x2B2A`	Database Hash
`0x2B2B`	BSS Control Point
`0x2B2C`	BSS Response
`0x2B2D`	Emergency ID
`0x2B2E`	Emergency Text
`0x2B2F`	ACS Status
`0x2B30`	ACS Data In
`0x2B31`	ACS Data Out Notify
`0x2B32`	ACS Data Out Indicate
`0x2B33`	ACS Control Point
`0x2B34`	Enhanced Blood Pressure Measurement

0x2B35	Enhanced Intermediate Cuff Pressure
0x2B36	Blood Pressure Record
0x2B37	Registered User
0x2B38	BR-EDR Handover Data
0x2B39	Bluetooth SIG Data
0x2B3A	Server Supported Features
0x2B3B	Physical Activity Monitor Features
0x2B3C	General Activity Instantaneous Data
0x2B3D	General Activity Summary Data
0x2B3E	CardioRespiratory Activity Instantaneous Data
0x2B3F	CardioRespiratory Activity Summary Data
0x2B40	Step Counter Activity Summary Data
0x2B41	Sleep Activity Instantaneous Data
0x2B42	Sleep Activity Summary Data
0x2B43	Physical Activity Monitor Control Point
0x2B44	Activity Current Session
0x2B45	Physical Activity Session Descriptor
0x2B46	Preferred Units
0x2B47	High Resolution Height
0x2B48	Middle Name
0x2B49	Stride Length
0x2B4A	Handedness
0x2B4B	Device Wearing Position
0x2B4C	Four Zone Heart Rate Limits
0x2B4D	High Intensity Exercise Threshold
0x2B4E	Activity Goal
0x2B4F	Sedentary Interval Notification
0x2B50	Caloric Intake
0x2B51	TMAP Role
0x2B77	Audio Input State
0x2B78	Gain Settings Attribute
0x2B79	Audio Input Type
0x2B7A	Audio Input Status
0x2B7B	Audio Input Control Point
0x2B7C	Audio Input Description
0x2B7D	Volume State

`0x2B7E`	Volume Control Point
`0x2B7F`	Volume Flags
`0x2B80`	Volume Offset State
`0x2B81`	Audio Location
`0x2B82`	Volume Offset Control Point
`0x2B83`	Audio Output Description
`0x2B84`	Set Identity Resolving Key
`0x2B85`	Coordinated Set Size
`0x2B86`	Set Member Lock
`0x2B87`	Set Member Rank
`0x2B88`	Encrypted Data Key Material
`0x2B89`	Apparent Energy 32
`0x2B8A`	Apparent Power
`0x2B8B`	Live Health Observations
`0x2B8C`	CO\{}textsubscript{2} Concentration
`0x2B8D`	Cosine of the Angle
`0x2B8E`	Device Time Feature
`0x2B8F`	Device Time Parameters
`0x2B90`	Device Time
`0x2B91`	Device Time Control Point
`0x2B92`	Time Change Log Data
`0x2B93`	Media Player Name
`0x2B94`	Media Player Icon Object ID
`0x2B95`	Media Player Icon URL
`0x2B96`	Track Changed
`0x2B97`	Track Title
`0x2B98`	Track Duration
`0x2B99`	Track Position
`0x2B9A`	Playback Speed
`0x2B9B`	Seeking Speed
`0x2B9C`	Current Track Segments Object ID
`0x2B9D`	Current Track Object ID
`0x2B9E`	Next Track Object ID
`0x2B9F`	Parent Group Object ID
`0x2BA0`	Current Group Object ID
`0x2BA1`	Playing Order

0x2BA2	Playing Orders Supported
0x2BA3	Media State
0x2BA4	Media Control Point
0x2BA5	Media Control Point Opcodes Supported
0x2BA6	Search Results Object ID
0x2BA7	Search Control Point
0x2BA8	Energy 32
0x2BA9	Media Player Icon Object Type
0x2BAA	Track Segments Object Type
0x2BAB	Track Object Type
0x2BAC	Group Object Type
0x2BAD	Constant Tone Extension Enable
0x2BAE	Advertising Constant Tone Extension Minimum Length
0x2BAF	Advertising Constant Tone Extension Minimum Transmit Count
0x2BB0	Advertising Constant Tone Extension Transmit Duration
0x2BB1	Advertising Constant Tone Extension Interval
0x2BB2	Advertising Constant Tone Extension PHY
0x2BB3	Bearer Provider Name
0x2BB4	Bearer UCI
0x2BB5	Bearer Technology
0x2BB6	Bearer URI Schemes Supported List
0x2BB7	Bearer Signal Strength
0x2BB8	Bearer Signal Strength Reporting Interval
0x2BB9	Bearer List Current Calls
0x2BBA	Content Control ID
0x2BBB	Status Flags
0x2BBC	Incoming Call Target Bearer URI
0x2BBD	Call State
0x2BBE	Call Control Point
0x2BBF	Call Control Point Optional Opcodes
0x2BC0	Termination Reason
0x2BC1	Incoming Call
0x2BC2	Call Friendly Name
0x2BC3	Mute
0x2BC4	Sink ASE
0x2BC5	Source ASE

0x2BC6	ASE Control Point
0x2BC7	Broadcast Audio Scan Control Point
0x2BC8	Broadcast Receive State
0x2BC9	Sink PAC
0x2BCA	Sink Audio Locations
0x2BCB	Source PAC
0x2BCC	Source Audio Locations
0x2BCD	Available Audio Contexts
0x2BCE	Supported Audio Contexts
0x2BCF	Ammonia Concentration
0x2BD0	Carbon Monoxide Concentration
0x2BD1	Methane Concentration
0x2BD2	Nitrogen Dioxide Concentration
0x2BD3	Non-Methane Volatile Organic Compounds Concentration
0x2BD4	Ozone Concentration
0x2BD5	Particulate Matter - PM1 Concentration
0x2BD6	Particulate Matter - PM2.5 Concentration
0x2BD7	Particulate Matter - PM10 Concentration
0x2BD8	Sulfur Dioxide Concentration
0x2BD9	Sulfur Hexafluoride Concentration
0x2BDA	Hearing Aid Features
0x2BDB	Hearing Aid Preset Control Point
0x2BDC	Active Preset Index
0x2BDD	Stored Health Observations
0x2BDE	Fixed String 64
0x2BDF	High Temperature
0x2BE0	High Voltage
0x2BE1	Light Distribution
0x2BE2	Light Output
0x2BE3	Light Source Type
0x2BE4	Noise
0x2BE5	Relative Runtime in a Correlated Color Temperature Range
0x2BE6	Time Second 32
0x2BE7	VOC Concentration
0x2BE8	Voltage Frequency
0x2BE9	Battery Critical Status

0x2BEA	Battery Health Status
0x2BEB	Battery Health Information
0x2BEC	Battery Information
0x2BED	Battery Level Status
0x2BEE	Battery Time Status
0x2BEF	Estimated Service Date
0x2BF0	Battery Energy Status
0x2BF1	Observation Schedule Changed
0x2BF2	Current Elapsed Time
0x2BF3	Health Sensor Features
0x2BF4	GHS Control Point
0x2BF5	LE GATT Security Levels
0x2BF6	ESL Address
0x2BF7	AP Sync Key Material
0x2BF8	ESL Response Key Material
0x2BF9	ESL Current Absolute Time
0x2BFA	ESL Display Information
0x2BFB	ESL Image Information
0x2BFC	ESL Sensor Information
0x2BFD	ESL LED Information
0x2BFE	ESL Control Point
0x2BFF	UDI for Medical Devices
0x2C00	GMAP Role
0x2C01	UGG Features
0x2C02	UGT Features
0x2C03	BGS Features
0x2C04	BGR Features

3.9   Object Types

3.9.1   Object Types by Name

Last Modified: 2023-02-02

Filename: assigned_numbers/uuids/object_types.yaml

Object Name	UUID
Directory Listing	0x2ACB
Unspecified	0x2ACA

3.9.2   Object Types by UUID

Last Modified: 2023-02-02

Filename: assigned_numbers/uuids/object_types.yaml

UUID	Object Name
0x2ACA	Unspecified
0x2ACB	Directory Listing

3.10   SDO Services

Last Modified: 2023-11-17

Filename: assigned_numbers/uuids/sdo_uuids.yaml

UUID	Service Name	SDO Name
0xFFF2	Access Control service	Connectivity Standards Alliance
0xFFF3	FiRa Consortium service	FiRa Consortium
0xFFF4	FiRa Consortium service	FiRa Consortium
0xFFF5	Car Connectivity Consortium, LLC service	Car Connectivity Consortium, LLC
0xFFF6	ZigBee Alliance service	ZigBee Alliance
0xFFF7	ZigBee Alliance service	ZigBee Alliance
0xFFF8	Mopria Alliance BLE service	Mopria Alliance
0xFFF9	FIDO2 secure client-to-authenticator transport service	Fast IDentity Online Alliance (FIDO)
0xFFFA	ASTM Remote ID service	ASTM International
0xFFFB	Direct Thread Commissioning service	Thread Group, Inc.
0xFFFC	Wireless Power Transfer (WPT) service	AirFuel Alliance
0xFFFD	Universal Second Factor Authenticator service	Fast IDentity Online Alliance (FIDO)
0xFFFE	Wireless Power Transfer service	AirFuel Alliance (formerly Alliance for Wireless Power)

3.11 Member Services

The table lists the Member Service UUIDs allocated to member companies. The table lists only the name of the member company that requested the UUID and not the name of the service.

To request a new Member Service UUID, please submit a ticket to Bluetooth Support and select the Assigned Numbers category (login required). For those not familiar with the assignment process, please refer to Section 2.3 of the Assigned Numbers Process Document which is available on the Templates and Documents page.

Please allow five business days for your request to be fulfilled, and another five business days from the time your request is fulfilled to view your Member Service UUID on this page.

Last Modified: 2023-12-11

Filename: assigned_numbers/uuids/member_uuids.yaml

UUID	Member Company
0xFC9C	Binary Power, Inc.
0xFC9D	Lenovo (Singapore) Pte Ltd.
0xFC9E	Dell Computer Corporation
0xFC9F	Delta Development Team, Inc
0xFCA0	Apple Inc.
0xFCA1	PF SCHWEISSTECHNOLOGIE GMBH
0xFCA2	Meizu Technology Co., Ltd.
0xFCA3	Gunnebo Aktiebolag
0xFCA4	HP Inc.
0xFCA5	HAYWARD INDUSTRIES, INC.
0xFCA6	Hubble Network Inc.
0xFCA7	Hubble Network Inc.
0xFCA8	Medtronic Inc.
0xFCA9	Medtronic Inc.
0xFCAA	Spintly, Inc.
0xFCAB	IRISS INC.
0xFCAC	IRISS INC.
0xFCAD	Beijing 99help Safety Technology Co., Ltd
0xFCAE	Imagine Marketing Limited
0xFCAF	AltoBeam Inc.
0xFCB0	Ford Motor Company
0xFCB1	Google LLC
0xFCB2	Apple Inc.
0xFCB3	SWEEN
0xFCB4	OMRON HEALTHCARE Co., Ltd.

0xFCB5	OMRON HEALTHCARE Co., Ltd.
0xFCB6	OMRON HEALTHCARE Co., Ltd.
0xFCB7	T-Mobile USA
0xFCB8	Ribbiot, INC.
0xFCB9	Lumi United Technology Co., Ltd
0xFCBA	BlueID GmbH
0xFCBB	SharkNinja Operating LLC
0xFCBC	Drowsy Digital, Inc.
0xFCBD	Toshiba Corporation
0xFCBE	Musen Connect, Inc.
0xFCBF	ASSA ABLOY Opening Solutions Sweden AB
0xFCC0	Xiaomi Inc.
0xFCC1	TIMECODE SYSTEMS LIMITED
0xFCC2	Qualcomm Technologies, Inc.
0xFCC3	HP Inc.
0xFCC4	OMRON(DALIAN) CO,.LTD.
0xFCC5	OMRON(DALIAN) CO,.LTD.
0xFCC6	Wiliot LTD.
0xFCC7	PB INC.
0xFCC8	Allthenticate, Inc.
0xFCC9	SkyHawke Technologies
0xFCCA	Cosmed s.r.l.
0xFCCB	TOTO LTD.
0xFCCC	WiFi Alliance
0xFCCD	Zound Industries International AB
0xFCCE	Luna Health, Inc.
0xFCCF	Google LLC
0xFCD0	Laerdal Medical AS
0xFCD1	Shenzhen Benwei Media Co.,Ltd.
0xFCD2	Allterco Robotics ltd
0xFCD3	Fisher & Paykel Healthcare
0xFCD4	OMRON HEALTHCARE
0xFCD5	Nortek Security & Control
0xFCD6	SWISSINNO SOLUTIONS AG
0xFCD7	PowerPal Pty Ltd
0xFCD8	Appex Factory S.L.

0xFCD9	Huso, INC
0xFCDA	Draeger
0xFCDB	aconno GmbH
0xFCDC	Amazon.com Services, LLC
0xFCDD	Mobilaris AB
0xFCDE	ARCTOP, INC.
0xFCDF	NIO USA, Inc.
0xFCE0	Akciju sabiedriba "SAF TEHNIKA"
0xFCE1	Sony Group Corporation
0xFCE2	Baracoda Daily Healthtech
0xFCE3	Smith & Nephew Medical Limited
0xFCE4	Samsara Networks, Inc
0xFCE5	Samsara Networks, Inc
0xFCE6	Guard RFID Solutions Inc.
0xFCE7	TKH Security B.V.
0xFCE8	ITT Industries
0xFCE9	MindRhythm, Inc.
0xFCEA	Chess Wise B.V.
0xFCEB	Avi-On
0xFCEC	Griffwerk GmbH
0xFCED	Workaround Gmbh
0xFCEE	Velentium, LLC
0xFCEF	Divesoft s.r.o.
0xFCF0	Security Enhancement Systems, LLC
0xFCF1	Google LLC
0xFCF2	Bitwards Oy
0xFCF3	Armatura LLC
0xFCF4	Allegion
0xFCF5	Trident Communication Technology, LLC
0xFCF6	The Linux Foundation
0xFCF7	Honor Device Co., Ltd.
0xFCF8	Honor Device Co., Ltd.
0xFCF9	Leupold & Stevens, Inc.
0xFCFA	Leupold & Stevens, Inc.
0xFCFB	Shenzhen Benwei Media Co., Ltd.
0xFCFC	Barrot Technology Co.,Ltd.

`0xFCFD`	Barrot Technology Co.,Ltd.
`0xFCFE`	Sennheiser Consumer Audio GmbH
`0xFCFF`	701x
`0xFD00`	FUTEK Advanced Sensor Technology, Inc.
`0xFD01`	Sanvita Medical Corporation
`0xFD02`	LEGO System A/S
`0xFD03`	Quuppa Oy
`0xFD04`	Shure Inc.
`0xFD05`	Qualcomm Technologies, Inc.
`0xFD06`	RACE-AI LLC
`0xFD07`	Swedlock AB
`0xFD08`	Bull Group Incorporated Company
`0xFD09`	Cousins and Sears LLC
`0xFD0A`	Luminostics, Inc.
`0xFD0B`	Luminostics, Inc.
`0xFD0C`	OSM HK Limited
`0xFD0D`	Blecon Ltd
`0xFD0E`	HerdDogg, Inc
`0xFD0F`	AEON MOTOR CO.,LTD.
`0xFD10`	AEON MOTOR CO.,LTD.
`0xFD11`	AEON MOTOR CO.,LTD.
`0xFD12`	AEON MOTOR CO.,LTD.
`0xFD13`	BRG Sports, Inc.
`0xFD14`	BRG Sports, Inc.
`0xFD15`	Panasonic Corporation
`0xFD16`	Sensitech, Inc.
`0xFD17`	LEGIC Identsystems AG
`0xFD18`	LEGIC Identsystems AG
`0xFD19`	Smith & Nephew Medical Limited
`0xFD1A`	CSIRO
`0xFD1B`	Helios Sports, Inc.
`0xFD1C`	Brady Worldwide Inc.
`0xFD1D`	Samsung Electronics Co., Ltd
`0xFD1E`	Plume Design Inc.
`0xFD1F`	3M
`0xFD20`	GN Hearing A/S

0xFD21	Huawei Technologies Co., Ltd.
0xFD22	Huawei Technologies Co., Ltd.
0xFD23	DOM Sicherheitstechnik GmbH & Co. KG
0xFD24	GD Midea Air-Conditioning Equipment Co., Ltd.
0xFD25	GD Midea Air-Conditioning Equipment Co., Ltd.
0xFD26	Novo Nordisk A/S
0xFD27	Integrated Illumination Systems, Inc.
0xFD28	Julius Blum GmbH
0xFD29	Asahi Kasei Corporation
0xFD2A	Sony Corporation
0xFD2B	The Access Technologies
0xFD2C	The Access Technologies
0xFD2D	Xiaomi Inc.
0xFD2E	Bitstrata Systems Inc.
0xFD2F	Bitstrata Systems Inc.
0xFD30	Sesam Solutions BV
0xFD31	LG Electronics Inc.
0xFD32	Gemalto Holding BV
0xFD33	DashLogic, Inc.
0xFD34	Aerosens LLC.
0xFD35	Transsion Holdings Limited
0xFD36	Google LLC
0xFD37	TireCheck GmbH
0xFD38	Danfoss A/S
0xFD39	PREDIKTAS
0xFD3A	Verkada Inc.
0xFD3B	Verkada Inc.
0xFD3C	Redline Communications Inc.
0xFD3D	Woan Technology (Shenzhen) Co., Ltd.
0xFD3E	Pure Watercraft, inc.
0xFD3F	Cognosos, Inc
0xFD40	Beflex Inc.
0xFD41	Amazon Lab126
0xFD42	Globe (Jiangsu) Co.,Ltd
0xFD43	Apple Inc.
0xFD44	Apple Inc.

`0xFD45`	GB Solution co.,Ltd
`0xFD46`	Lemco IKE
`0xFD47`	Liberty Global Inc.
`0xFD48`	Geberit International AG
`0xFD49`	Panasonic Corporation
`0xFD4A`	Sigma Elektro GmbH
`0xFD4B`	Samsung Electronics Co., Ltd.
`0xFD4C`	Adolf Wuerth GmbH & Co KG
`0xFD4D`	70mai Co.,Ltd.
`0xFD4E`	70mai Co.,Ltd.
`0xFD4F`	Forkbeard Technologies AS
`0xFD50`	Hangzhou Tuya Information Technology Co., Ltd
`0xFD51`	UTC Fire and Security
`0xFD52`	UTC Fire and Security
`0xFD53`	PCI Private Limited
`0xFD54`	Qingdao Haier Technology Co., Ltd.
`0xFD55`	Braveheart Wireless, Inc.
`0xFD56`	Resmed Ltd
`0xFD57`	Volvo Car Corporation
`0xFD58`	Volvo Car Corporation
`0xFD59`	Samsung Electronics Co., Ltd.
`0xFD5A`	Samsung Electronics Co., Ltd.
`0xFD5B`	V2SOFT INC.
`0xFD5C`	React Mobile
`0xFD5D`	maxon motor ltd.
`0xFD5E`	Tapkey GmbH
`0xFD5F`	Meta Platforms Technologies, LLC
`0xFD60`	Sercomm Corporation
`0xFD61`	Arendi AG
`0xFD62`	Fitbit, Inc.
`0xFD63`	Fitbit, Inc.
`0xFD64`	INRIA
`0xFD65`	Razer Inc.
`0xFD66`	Zebra Technologies Corporation
`0xFD67`	Montblanc Simplo GmbH
`0xFD68`	Ubique Innovation AG

0xFD69	Samsung Electronics Co., Ltd
0xFD6A	Emerson
0xFD6B	rapitag GmbH
0xFD6C	Samsung Electronics Co., Ltd.
0xFD6D	Sigma Elektro GmbH
0xFD6E	Polidea sp. z o.o.
0xFD6F	Apple, Inc.
0xFD70	GuangDong Oppo Mobile Telecommunications Corp., Ltd
0xFD71	GN Hearing A/S
0xFD72	Logitech International SA
0xFD73	BRControls Products BV
0xFD74	BRControls Products BV
0xFD75	Insulet Corporation
0xFD76	Insulet Corporation
0xFD77	Withings
0xFD78	Withings
0xFD79	Withings
0xFD7A	Withings
0xFD7B	WYZE LABS, INC.
0xFD7C	Toshiba Information Systems(Japan) Corporation
0xFD7D	Center for Advanced Research Wernher Von Braun
0xFD7E	Samsung Electronics Co., Ltd.
0xFD7F	Husqvarna AB
0xFD80	Phindex Technologies, Inc
0xFD81	CANDY HOUSE, Inc.
0xFD82	Sony Corporation
0xFD83	iNFORM Technology GmbH
0xFD84	Tile, Inc.
0xFD85	Husqvarna AB
0xFD86	Abbott
0xFD87	Google LLC
0xFD88	Urbanminded LTD
0xFD89	Urbanminded LTD
0xFD8A	Signify Netherlands B.V.
0xFD8B	Jigowatts Inc.
0xFD8C	Google LLC

`0xFD8D`	quip NYC Inc.
`0xFD8E`	Motorola Solutions
`0xFD8F`	Matrix ComSec Pvt. Ltd.
`0xFD90`	Guangzhou SuperSound Information Technology Co.,Ltd
`0xFD91`	Groove X, Inc.
`0xFD92`	Qualcomm Technologies International, Ltd. (QTIL)
`0xFD93`	Bayerische Motoren Werke AG
`0xFD94`	Hewlett Packard Enterprise
`0xFD95`	Rigado
`0xFD96`	Google LLC
`0xFD97`	June Life, Inc.
`0xFD98`	Disney Worldwide Services, Inc.
`0xFD99`	ABB Oy
`0xFD9A`	Huawei Technologies Co., Ltd.
`0xFD9B`	Huawei Technologies Co., Ltd.
`0xFD9C`	Huawei Technologies Co., Ltd.
`0xFD9D`	Gastec Corporation
`0xFD9E`	The Coca-Cola Company
`0xFD9F`	VitalTech Affiliates LLC
`0xFDA0`	Secugen Corporation
`0xFDA1`	Groove X, Inc
`0xFDA2`	Groove X, Inc
`0xFDA3`	Inseego Corp.
`0xFDA4`	Inseego Corp.
`0xFDA5`	Neurostim OAB, Inc.
`0xFDA6`	WWZN Information Technology Company Limited
`0xFDA7`	WWZN Information Technology Company Limited
`0xFDA8`	PSA Peugeot Citroën
`0xFDA9`	Rhombus Systems, Inc.
`0xFDAA`	Xiaomi Inc.
`0xFDAB`	Xiaomi Inc.
`0xFDAC`	Tentacle Sync GmbH
`0xFDAD`	Houwa System Design, k.k.
`0xFDAE`	Houwa System Design, k.k.
`0xFDAF`	Wiliot LTD
`0xFDB0`	Proxy Technologies, Inc.

0xFDB1	Proxy Technologies, Inc.
0xFDB2	Portable Multimedia Ltd
0xFDB3	Audiodo AB
0xFDB4	HP Inc
0xFDB5	ECSG
0xFDB6	GWA Hygiene GmbH
0xFDB7	LivaNova USA Inc.
0xFDB8	LivaNova USA Inc.
0xFDB9	Comcast Cable Corporation
0xFDBA	Comcast Cable Corporation
0xFDBB	Profoto
0xFDBC	Emerson
0xFDBD	Clover Network, Inc.
0xFDBE	California Things Inc.
0xFDBF	California Things Inc.
0xFDC0	Hunter Douglas
0xFDC1	Hunter Douglas
0xFDC2	Baidu Online Network Technology (Beijing) Co., Ltd
0xFDC3	Baidu Online Network Technology (Beijing) Co., Ltd
0xFDC4	Simavita (Aust) Pty Ltd
0xFDC5	Automatic Labs
0xFDC6	Eli Lilly and Company
0xFDC7	Eli Lilly and Company
0xFDC8	Hach – Danaher
0xFDC9	Busch-Jaeger Elektro GmbH
0xFDCA	Fortin Electronic Systems
0xFDCB	Meggitt SA
0xFDCC	Shoof Technologies
0xFDCD	Qingping Technology (Beijing) Co., Ltd.
0xFDCE	SENNHEISER electronic GmbH & Co. KG
0xFDCF	Nalu Medical, Inc
0xFDD0	Huawei Technologies Co., Ltd
0xFDD1	Huawei Technologies Co., Ltd
0xFDD2	Bose Corporation
0xFDD3	FUBA Automotive Electronics GmbH
0xFDD4	LX Solutions Pty Limited

`0xFDD5`	Brompton Bicycle Ltd
`0xFDD6`	Ministry of Supply
`0xFDD7`	Emerson
`0xFDD8`	Jiangsu Teranovo Tech Co., Ltd.
`0xFDD9`	Jiangsu Teranovo Tech Co., Ltd.
`0xFDDA`	MHCS
`0xFDDB`	Samsung Electronics Co., Ltd.
`0xFDDC`	4iiii Innovations Inc.
`0xFDDD`	Arch Systems Inc
`0xFDDE`	Noodle Technology Inc.
`0xFDDF`	Harman International
`0xFDE0`	John Deere
`0xFDE1`	Fortin Electronic Systems
`0xFDE2`	Google LLC
`0xFDE3`	Abbott Diabetes Care
`0xFDE4`	JUUL Labs, Inc.
`0xFDE5`	SMK Corporation
`0xFDE6`	Intelletto Technologies Inc
`0xFDE7`	SECOM Co., LTD
`0xFDE8`	Robert Bosch GmbH
`0xFDE9`	Spacesaver Corporation
`0xFDEA`	SeeScan, Inc
`0xFDEB`	Syntronix Corporation
`0xFDEC`	Mannkind Corporation
`0xFDED`	Pole Star
`0xFDEE`	Huawei Technologies Co., Ltd.
`0xFDEF`	ART AND PROGRAM, INC.
`0xFDF0`	Google LLC
`0xFDF1`	LAMPLIGHT Co.,Ltd
`0xFDF2`	AMICCOM Electronics Corporation
`0xFDF3`	Amersports
`0xFDF4`	O. E. M. Controls, Inc.
`0xFDF5`	Milwaukee Electric Tools
`0xFDF6`	AIAIAI ApS
`0xFDF7`	HP Inc.
`0xFDF8`	Onvocal

`0xFDF9`	INIA
`0xFDFA`	Tandem Diabetes Care
`0xFDFB`	Tandem Diabetes Care
`0xFDFC`	Optrel AG
`0xFDFD`	RecursiveSoft Inc.
`0xFDFE`	ADHERIUM(NZ) LIMITED
`0xFDFF`	OSRAM GmbH
`0xFE00`	Amazon.com Services, Inc.
`0xFE01`	Duracell U.S. Operations Inc.
`0xFE02`	Robert Bosch GmbH
`0xFE03`	Amazon.com Services, Inc.
`0xFE04`	OpenPath Security Inc
`0xFE05`	CORE Transport Technologies NZ Limited
`0xFE06`	Qualcomm Technologies, Inc.
`0xFE07`	Sonos, Inc.
`0xFE08`	Microsoft
`0xFE09`	Pillsy, Inc.
`0xFE0A`	ruwido austria gmbh
`0xFE0B`	ruwido austria gmbh
`0xFE0C`	Procter & Gamble
`0xFE0D`	Procter & Gamble
`0xFE0E`	Setec Pty Ltd
`0xFE0F`	Signify Netherlands B.V. (formerly Philips Lighting B.V.)
`0xFE10`	LAPIS Technology Co., Ltd.
`0xFE11`	GMC-I Messtechnik GmbH
`0xFE12`	M-Way Solutions GmbH
`0xFE13`	Apple Inc.
`0xFE14`	Flextronics International USA Inc.
`0xFE15`	Amazon.com Services, Inc..
`0xFE16`	Footmarks, Inc.
`0xFE17`	Telit Wireless Solutions GmbH
`0xFE18`	Runtime, Inc.
`0xFE19`	Google LLC
`0xFE1A`	Tyto Life LLC
`0xFE1B`	Tyto Life LLC
`0xFE1C`	NetMedia, Inc.

`0xFE1D`	Illuminati Instrument Corporation
`0xFE1E`	LAMPLIGHT Co., Ltd.
`0xFE1F`	Garmin International, Inc.
`0xFE20`	Emerson
`0xFE21`	Bose Corporation
`0xFE22`	Zoll Medical Corporation
`0xFE23`	Zoll Medical Corporation
`0xFE24`	August Home Inc
`0xFE25`	Apple, Inc.
`0xFE26`	Google LLC
`0xFE27`	Google LLC
`0xFE28`	Ayla Networks
`0xFE29`	Gibson Innovations
`0xFE2A`	DaisyWorks, Inc.
`0xFE2B`	ITT Industries
`0xFE2C`	Google LLC
`0xFE2D`	LAMPLIGHT Co., Ltd.
`0xFE2E`	ERi,Inc.
`0xFE2F`	CRESCO Wireless, Inc
`0xFE30`	Volkswagen AG
`0xFE31`	Volkswagen AG
`0xFE32`	Pro-Mark, Inc.
`0xFE33`	CHIPOLO d.o.o.
`0xFE34`	SmallLoop LLC
`0xFE35`	HUAWEI Technologies Co., Ltd
`0xFE36`	HUAWEI Technologies Co., Ltd
`0xFE37`	Spaceek LTD
`0xFE38`	Spaceek LTD
`0xFE39`	TTS Tooltechnic Systems AG & Co. KG
`0xFE3A`	TTS Tooltechnic Systems AG & Co. KG
`0xFE3B`	Dolby Laboratories
`0xFE3C`	alibaba
`0xFE3D`	BD Medical
`0xFE3E`	BD Medical
`0xFE3F`	Friday Labs Limited
`0xFE40`	Inugo Systems Limited

0xFE41	Inugo Systems Limited
0xFE42	Nets A/S
0xFE43	Andreas Stihl AG & Co. KG
0xFE44	SK Telecom
0xFE45	Snapchat Inc
0xFE46	B&O Play A/S
0xFE47	General Motors
0xFE48	General Motors
0xFE49	SenionLab AB
0xFE4A	OMRON HEALTHCARE Co., Ltd.
0xFE4B	Signify Netherlands B.V. (formerly Philips Lighting B.V.)
0xFE4C	Volkswagen AG
0xFE4D	Casambi Technologies Oy
0xFE4E	NTT docomo
0xFE4F	Molekule, Inc.
0xFE50	Google LLC
0xFE51	SRAM
0xFE52	SetPoint Medical
0xFE53	3M
0xFE54	Motiv, Inc.
0xFE55	Google LLC
0xFE56	Google LLC
0xFE57	Dotted Labs
0xFE58	Nordic Semiconductor ASA
0xFE59	Nordic Semiconductor ASA
0xFE5A	Cronologics Corporation
0xFE5B	GT-tronics HK Ltd
0xFE5C	million hunters GmbH
0xFE5D	Grundfos A/S
0xFE5E	Plastc Corporation
0xFE5F	Eyefi, Inc.
0xFE60	Lierda Science & Technology Group Co., Ltd.
0xFE61	Logitech International SA
0xFE62	Indagem Tech LLC
0xFE63	Connected Yard, Inc.
0xFE64	Siemens AG

0xFE65	CHIPOLO d.o.o.
0xFE66	Intel Corporation
0xFE67	Lab Sensor Solutions
0xFE68	Capsle Technologies Inc.
0xFE69	Capsle Technologies Inc.
0xFE6A	Kontakt Micro-Location Sp. z o.o.
0xFE6B	TASER International, Inc.
0xFE6C	TASER International, Inc.
0xFE6D	The University of Tokyo
0xFE6E	The University of Tokyo
0xFE6F	LINE Corporation
0xFE70	Beijing Jingdong Century Trading Co., Ltd.
0xFE71	Plume Design Inc
0xFE72	Abbott (formerly St. Jude Medical, Inc.)
0xFE73	Abbott (formerly St. Jude Medical, Inc.)
0xFE74	unwire
0xFE75	TangoMe
0xFE76	TangoMe
0xFE77	Hewlett-Packard Company
0xFE78	Hewlett-Packard Company
0xFE79	Zebra Technologies
0xFE7A	Bragi GmbH
0xFE7B	Orion Labs, Inc.
0xFE7C	Telit Wireless Solutions (Formerly Stollmann E+V GmbH)
0xFE7D	Aterica Health Inc.
0xFE7E	Awear Solutions Ltd
0xFE7F	Doppler Lab
0xFE80	Doppler Lab
0xFE81	Medtronic Inc.
0xFE82	Medtronic Inc.
0xFE83	Blue Bite
0xFE84	RF Digital Corp
0xFE85	RF Digital Corp
0xFE86	HUAWEI Technologies Co., Ltd
0xFE87	Qingdao Yeelink Information Technology Co., Ltd.（青岛亿联客信息技术有限公司）

0xFE88	SALTO SYSTEMS S.L.
0xFE89	B&O Play A/S
0xFE8A	Apple, Inc.
0xFE8B	Apple, Inc.
0xFE8C	TRON Forum
0xFE8D	Interaxon Inc.
0xFE8E	ARM Ltd
0xFE8F	CSR
0xFE90	JUMA
0xFE91	Shanghai Imilab Technology Co.,Ltd
0xFE92	Jarden Safety & Security
0xFE93	OttoQ In
0xFE94	OttoQ In
0xFE95	Xiaomi Inc.
0xFE96	Tesla Motors Inc.
0xFE97	Tesla Motors Inc.
0xFE98	Currant Inc
0xFE99	Currant Inc
0xFE9A	Estimote
0xFE9B	Samsara Networks, Inc
0xFE9C	GSI Laboratories, Inc.
0xFE9D	Mobiquity Networks Inc
0xFE9E	Dialog Semiconductor B.V.
0xFE9F	Google LLC
0xFEA0	Google LLC
0xFEA1	Intrepid Control Systems, Inc.
0xFEA2	Intrepid Control Systems, Inc.
0xFEA3	ITT Industries
0xFEA4	Paxton Access Ltd
0xFEA5	GoPro, Inc.
0xFEA6	GoPro, Inc.
0xFEA7	UTC Fire and Security
0xFEA8	Savant Systems LLC
0xFEA9	Savant Systems LLC
0xFEAA	Google LLC
0xFEAB	Nokia

`0xFEAC`	Nokia
`0xFEAD`	Nokia
`0xFEAE`	Nokia
`0xFEAF`	Nest Labs Inc
`0xFEB0`	Nest Labs Inc
`0xFEB1`	Electronics Tomorrow Limited
`0xFEB2`	Microsoft Corporation
`0xFEB3`	Taobao
`0xFEB4`	WiSilica Inc.
`0xFEB5`	WiSilica Inc.
`0xFEB6`	Vencer Co., Ltd
`0xFEB7`	Meta Platforms, Inc.
`0xFEB8`	Meta Platforms, Inc.
`0xFEB9`	LG Electronics
`0xFEBA`	Tencent Holdings Limited
`0xFEBB`	adafruit industries
`0xFEBC`	Dexcom Inc
`0xFEBD`	Clover Network, Inc
`0xFEBE`	Bose Corporation
`0xFEBF`	Nod, Inc.
`0xFEC0`	KDDI Corporation
`0xFEC1`	KDDI Corporation
`0xFEC2`	Blue Spark Technologies, Inc.
`0xFEC3`	360fly, Inc.
`0xFEC4`	PLUS Location Systems
`0xFEC5`	Realtek Semiconductor Corp.
`0xFEC6`	Kocomojo, LLC
`0xFEC7`	Apple, Inc.
`0xFEC8`	Apple, Inc.
`0xFEC9`	Apple, Inc.
`0xFECA`	Apple, Inc.
`0xFECB`	Apple, Inc.
`0xFECC`	Apple, Inc.
`0xFECD`	Apple, Inc.
`0xFECE`	Apple, Inc.
`0xFECF`	Apple, Inc.

`0xFED0`	Apple, Inc.
`0xFED1`	Apple, Inc.
`0xFED2`	Apple, Inc.
`0xFED3`	Apple, Inc.
`0xFED4`	Apple, Inc.
`0xFED5`	Plantronics Inc.
`0xFED6`	Broadcom
`0xFED7`	Broadcom
`0xFED8`	Google LLC
`0xFED9`	Pebble Technology Corporation
`0xFEDA`	ISSC Technologies Corp.
`0xFEDB`	Perka, Inc.
`0xFEDC`	Jawbone
`0xFEDD`	Jawbone
`0xFEDE`	Coin, Inc.
`0xFEDF`	Design SHIFT
`0xFEE0`	Anhui Huami Information Technology Co., Ltd.
`0xFEE1`	Anhui Huami Information Technology Co., Ltd.
`0xFEE2`	Anki, Inc.
`0xFEE3`	Anki, Inc.
`0xFEE4`	Nordic Semiconductor ASA
`0xFEE5`	Nordic Semiconductor ASA
`0xFEE6`	Silvair, Inc.
`0xFEE7`	Tencent Holdings Limited.
`0xFEE8`	Quintic Corp.
`0xFEE9`	Quintic Corp.
`0xFEEA`	Swirl Networks, Inc.
`0xFEEB`	Swirl Networks, Inc.
`0xFEEC`	Tile, Inc.
`0xFEED`	Tile, Inc.
`0xFEEE`	Polar Electro Oy
`0xFEEF`	Polar Electro Oy
`0xFEF0`	Intel
`0xFEF1`	CSR
`0xFEF2`	CSR
`0xFEF3`	Google LLC

0xFEF4	Google LLC
0xFEF5	Dialog Semiconductor GmbH
0xFEF6	Wicentric, Inc.
0xFEF7	Aplix Corporation
0xFEF8	Aplix Corporation
0xFEF9	PayPal, Inc.
0xFEFA	PayPal, Inc.
0xFEFB	Telit Wireless Solutions (Formerly Stollmann E+V GmbH)
0xFEFC	Gimbal, Inc.
0xFEFD	Gimbal, Inc.
0xFEFE	GN Hearing A/S
0xFEFF	GN Netcom

3.12   Mesh Profiles

Note: The allocations in this section are associated with draft specifications and are subject to change.

Last Modified: 2023-09-13

Filename: assigned_numbers/uuids/mesh_profile_uuids.yaml

UUID	Mesh Profile Name
0x1600	Ambient Light Sensor NLC Profile 1.0
0x1601	Basic Lightness Controller NLC Profile 1.0
0x1602	Basic Scene Selector NLC Profile 1.0
0x1603	Dimming Control NLC Profile 1.0
0x1604	Energy Monitor NLC Profile 1.0
0x1605	Occupancy Sensor NLC Profile 1.0

4   Mesh

The following section includes the assigned numbers used by the set of Mesh specifications [17] [18] [16] [14] [15] .

Note: The allocations in this section are associated with draft specifications and are subject to change.

4.1   Mesh Model Identifiers

The following section lists the model identifiers assigned to models in the set of Mesh specifications [17] [18] [16] [14] [15] .

4.1.1   Mesh Model Identifiers by Value

The table below lists the assigned model identifiers organized by model identifier value.

Last Modified: 2023-09-13

Filename: assigned_numbers/mesh/mesh_model_uuids.yaml

Mesh Model Identifier	Mesh Model Name
0x0000	Configuration Server
0x0001	Configuration Client
0x0002	Health Server
0x0003	Health Client
0x0004	Remote Provisioning Server
0x0005	Remote Provisioning Client
0x0006	Directed Forwarding Configuration Server
0x0007	Directed Forwarding Configuration Client
0x0008	Bridge Configuration Server
0x0009	Bridge Configuration Client
0x000A	Mesh Private Beacon Server
0x000B	Mesh Private Beacon Client
0x000C	On-Demand Private Proxy Server
0x000D	On-Demand Private Proxy Client
0x000E	SAR Configuration Server
0x000F	SAR Configuration Client
0x0010	Opcodes Aggregator Server
0x0011	Opcodes Aggregator Client
0x0012	Large Composition Data Server
0x0013	Large Composition Data Client
0x0014	Solicitation PDU RPL Configuration Server
0x0015	Solicitation PDU RPL Configuration Client
0x1000	Generic OnOff Server
0x1001	Generic OnOff Client
0x1002	Generic Level Server
0x1003	Generic Level Client

0x1004	Generic Default Transition Time Server
0x1005	Generic Default Transition Time Client
0x1006	Generic Power OnOff Server
0x1007	Generic Power OnOff Setup Server
0x1008	Generic Power OnOff Client
0x1009	Generic Power Level Server
0x100A	Generic Power Level Setup Server
0x100B	Generic Power Level Client
0x100C	Generic Battery Server
0x100D	Generic Battery Client
0x100E	Generic Location Server
0x100F	Generic Location Setup Server
0x1010	Generic Location Client
0x1011	Generic Admin Property Server
0x1012	Generic Manufacturer Property Server
0x1013	Generic User Property Server
0x1014	Generic Client Property Server
0x1015	Generic Property Client
0x1100	Sensor Server
0x1101	Sensor Setup Server
0x1102	Sensor Client
0x1200	Time Server
0x1201	Time Setup Server
0x1202	Time Client
0x1203	Scene Server
0x1204	Scene Setup Server
0x1205	Scene Client
0x1206	Scheduler Server
0x1207	Scheduler Setup Server
0x1208	Scheduler Client
0x1300	Light Lightness Server
0x1301	Light Lightness Setup Server
0x1302	Light Lightness Client
0x1303	Light CTL Server
0x1304	Light CTL Setup Server
0x1305	Light CTL Client

0x1306	Light CTL Temperature Server
0x1307	Light HSL Server
0x1308	Light HSL Setup Server
0x1309	Light HSL Client
0x130A	Light HSL Hue Server
0x130B	Light HSL Saturation Server
0x130C	Light xyL Server
0x130D	Light xyL Setup Server
0x130E	Light xyL Client
0x130F	Light LC Server
0x1310	Light LC Setup Server
0x1311	Light LC Client
0x1312	IEC 62386-104 Model
0x1400	BLOB Transfer Server
0x1401	BLOB Transfer Client
0x1402	Firmware Update Server
0x1403	Firmware Update Client
0x1404	Firmware Distribution Server
0x1405	Firmware Distribution Client

4.1.2 Mesh Model Identifiers by Name

The table below lists the assigned model identifiers organized by model name.

Last Modified: 2023-09-13

Filename: assigned_numbers/mesh/mesh_model_uuids.yaml

Mesh Model Name	Mesh Model Identifier
BLOB Transfer Client	0x1401
BLOB Transfer Server	0x1400
Bridge Configuration Client	0x0009
Bridge Configuration Server	0x0008
Configuration Client	0x0001
Configuration Server	0x0000
Directed Forwarding Configuration Client	0x0007
Directed Forwarding Configuration Server	0x0006
Firmware Distribution Client	0x1405

Firmware Distribution Server	0x1404
Firmware Update Client	0x1403
Firmware Update Server	0x1402
Generic Admin Property Server	0x1011
Generic Battery Client	0x100D
Generic Battery Server	0x100C
Generic Client Property Server	0x1014
Generic Default Transition Time Client	0x1005
Generic Default Transition Time Server	0x1004
Generic Level Client	0x1003
Generic Level Server	0x1002
Generic Location Client	0x1010
Generic Location Server	0x100E
Generic Location Setup Server	0x100F
Generic Manufacturer Property Server	0x1012
Generic OnOff Client	0x1001
Generic OnOff Server	0x1000
Generic Power Level Client	0x100B
Generic Power Level Server	0x1009
Generic Power Level Setup Server	0x100A
Generic Power OnOff Client	0x1008
Generic Power OnOff Server	0x1006
Generic Power OnOff Setup Server	0x1007
Generic Property Client	0x1015
Generic User Property Server	0x1013
Health Client	0x0003
Health Server	0x0002
IEC 62386-104 Model	0x1312
Large Composition Data Client	0x0013
Large Composition Data Server	0x0012
Light CTL Client	0x1305
Light CTL Server	0x1303
Light CTL Setup Server	0x1304
Light CTL Temperature Server	0x1306
Light HSL Client	0x1309
Light HSL Hue Server	0x130A

Light HSL Saturation Server	0x130B
Light HSL Server	0x1307
Light HSL Setup Server	0x1308
Light LC Client	0x1311
Light LC Server	0x130F
Light LC Setup Server	0x1310
Light Lightness Client	0x1302
Light Lightness Server	0x1300
Light Lightness Setup Server	0x1301
Light xyL Client	0x130E
Light xyL Server	0x130C
Light xyL Setup Server	0x130D
Mesh Private Beacon Client	0x000B
Mesh Private Beacon Server	0x000A
On-Demand Private Proxy Client	0x000D
On-Demand Private Proxy Server	0x000C
Opcodes Aggregator Client	0x0011
Opcodes Aggregator Server	0x0010
Remote Provisioning Client	0x0005
Remote Provisioning Server	0x0004
SAR Configuration Client	0x000F
SAR Configuration Server	0x000E
Scene Client	0x1205
Scene Server	0x1203
Scene Setup Server	0x1204
Scheduler Client	0x1208
Scheduler Server	0x1206
Scheduler Setup Server	0x1207
Sensor Client	0x1102
Sensor Server	0x1100
Sensor Setup Server	0x1101
Solicitation PDU RPL Configuration Client	0x0015
Solicitation PDU RPL Configuration Server	0x0014
Time Client	0x1202
Time Server	0x1200
Time Setup Server	0x1201

4.2   Mesh Model Message Opcodes

The following section lists the assigned values for model message opcodes in the set of Mesh specifications [17] [18] [16] [14] [15] .

4.2.1   Mesh Model Message Opcodes by Value

The table below lists the assigned numbers for model message opcodes organized by message opcode value.

Last Modified: 2023-09-13

Filenames: assigned_numbers/mesh/mmdl_opcodes.yaml, assigned_numbers/mesh/mesh_opcodes.yaml, assigned_numbers/mesh/dfumbt_opcodes.yaml

Message Opcode	Message Name
0x00	Config AppKey Add
0x01	Config AppKey Update
0x02	Config Composition Data Status
0x03	Config Model Publication Set
0x04	Health Current Status
0x05	Health Fault Status
0x06	Config Heartbeat Publication Status
0x40	Generic Location Global Status
0x41	Generic Location Global Set
0x42	Generic Location Global Set Unacknowledged
0x43	Generic Manufacturer Properties Status
0x44	Generic Manufacturer Property Set
0x45	Generic Manufacturer Property Set Unacknowledged
0x46	Generic Manufacturer Property Status
0x47	Generic Admin Properties Status
0x48	Generic Admin Property Set
0x49	Generic Admin Property Set Unacknowledged
0x4A	Generic Admin Property Status
0x4B	Generic User Properties Status
0x4C	Generic User Property Set
0x4D	Generic User Property Set Unacknowledged
0x4E	Generic User Property Status
0x4F	Generic Client Properties Get
0x50	Generic Client Properties Status
0x51	Sensor Descriptor Status

0x52	Sensor Status
0x53	Sensor Column Status
0x54	Sensor Series Status
0x55	Sensor Cadence Set
0x56	Sensor Cadence Set Unacknowledged
0x57	Sensor Cadence Status
0x58	Sensor Settings Status
0x59	Sensor Setting Set
0x5A	Sensor Setting Set Unacknowledged
0x5B	Sensor Setting Status
0x5C	Time Set
0x5D	Time Status
0x5E	Scene Status
0x5F	Scheduler Action Status
0x60	Scheduler Action Set
0x61	Scheduler Action Set Unacknowledged
0x62	Light LC Property Set
0x63	Light LC Property Set Unacknowledged
0x64	Light LC Property Status
0x65	IEC 62386-104 Frame
0x66	BLOB Chunk Transfer
0x67	BLOB Block Status
0x68	BLOB Partial Block Report
0x80 0x00	Config AppKey Delete
0x80 0x01	Config AppKey Get
0x80 0x02	Config AppKey List
0x80 0x03	Config AppKey Status
0x80 0x04	Health Attention Get
0x80 0x05	Health Attention Set
0x80 0x06	Health Attention Set Unacknowledged
0x80 0x07	Health Attention Status
0x80 0x08	Config Composition Data Get
0x80 0x09	Config Beacon Get
0x80 0x0A	Config Beacon Set
0x80 0x0B	Config Beacon Status
0x80 0x0C	Config Default TTL Get

0x80 0x0D	Config Default TTL Set
0x80 0x0E	Config Default TTL Status
0x80 0x0F	Config Friend Get
0x80 0x10	Config Friend Set
0x80 0x11	Config Friend Status
0x80 0x12	Config GATT Proxy Get
0x80 0x13	Config GATT Proxy Set
0x80 0x14	Config GATT Proxy Status
0x80 0x15	Config Key Refresh Phase Get
0x80 0x16	Config Key Refresh Phase Set
0x80 0x17	Config Key Refresh Phase Status
0x80 0x18	Config Model Publication Get
0x80 0x19	Config Model Publication Status
0x80 0x1A	Config Model Publication Virtual Address Set
0x80 0x1B	Config Model Subscription Add
0x80 0x1C	Config Model Subscription Delete
0x80 0x1D	Config Model Subscription Delete All
0x80 0x1E	Config Model Subscription Overwrite
0x80 0x1F	Config Model Subscription Status
0x80 0x20	Config Model Subscription Virtual Address Add
0x80 0x21	Config Model Subscription Virtual Address Delete
0x80 0x22	Config Model Subscription Virtual Address Overwrite
0x80 0x23	Config Network Transmit Get
0x80 0x24	Config Network Transmit Set
0x80 0x25	Config Network Transmit Status
0x80 0x26	Config Relay Get
0x80 0x27	Config Relay Set
0x80 0x28	Config Relay Status
0x80 0x29	Config SIG Model Subscription Get
0x80 0x2A	Config SIG Model Subscription List
0x80 0x2B	Config Vendor Model Subscription Get
0x80 0x2C	Config Vendor Model Subscription List
0x80 0x2D	Config Low Power Node PollTimeout Get
0x80 0x2E	Config Low Power Node PollTimeout Status
0x80 0x2F	Health Fault Clear
0x80 0x30	Health Fault Clear Unacknowledged

`0x80 0x31`	Health Fault Get
`0x80 0x32`	Health Fault Test
`0x80 0x33`	Health Fault Test Unacknowledged
`0x80 0x34`	Health Period Get
`0x80 0x35`	Health Period Set
`0x80 0x36`	Health Period Set Unacknowledged
`0x80 0x37`	Health Period Status
`0x80 0x38`	Config Heartbeat Publication Get
`0x80 0x39`	Config Heartbeat Publication Set
`0x80 0x3A`	Config Heartbeat Subscription Get
`0x80 0x3B`	Config Heartbeat Subscription Set
`0x80 0x3C`	Config Heartbeat Subscription Status
`0x80 0x3D`	Config Model App Bind
`0x80 0x3E`	Config Model App Status
`0x80 0x3F`	Config Model App Unbind
`0x80 0x40`	Config NetKey Add
`0x80 0x41`	Config NetKey Delete
`0x80 0x42`	Config NetKey Get
`0x80 0x43`	Config NetKey List
`0x80 0x44`	Config NetKey Status
`0x80 0x45`	Config NetKey Update
`0x80 0x46`	Config Node Identity Get
`0x80 0x47`	Config Node Identity Set
`0x80 0x48`	Config Node Identity Status
`0x80 0x49`	Config Node Reset
`0x80 0x4A`	Config Node Reset Status
`0x80 0x4B`	Config SIG Model App Get
`0x80 0x4C`	Config SIG Model App List
`0x80 0x4D`	Config Vendor Model App Get
`0x80 0x4E`	Config Vendor Model App List
`0x80 0x4F`	Remote Provisioning Scan Capabilities Get
`0x80 0x50`	Remote Provisioning Scan Capabilities Status
`0x80 0x51`	Remote Provisioning Scan Get
`0x80 0x52`	Remote Provisioning Scan Start
`0x80 0x53`	Remote Provisioning Scan Stop
`0x80 0x54`	Remote Provisioning Scan Status

`0x80 0x55`	Remote Provisioning Scan Report
`0x80 0x56`	Remote Provisioning Extended Scan Start
`0x80 0x57`	Remote Provisioning Extended Scan Report
`0x80 0x58`	Remote Provisioning Link Get
`0x80 0x59`	Remote Provisioning Link Open
`0x80 0x5A`	Remote Provisioning Link Close
`0x80 0x5B`	Remote Provisioning Link Status
`0x80 0x5C`	Remote Provisioning Link Report
`0x80 0x5D`	Remote Provisioning PDU Send
`0x80 0x5E`	Remote Provisioning PDU Outbound Report
`0x80 0x5F`	Remote Provisioning PDU Report
`0x80 0x60`	PRIVATE_BEACON_GET
`0x80 0x61`	PRIVATE_BEACON_SET
`0x80 0x62`	PRIVATE_BEACON_STATUS
`0x80 0x63`	PRIVATE_GATT_PROXY_GET
`0x80 0x64`	PRIVATE_GATT_PROXY_SET
`0x80 0x65`	PRIVATE_GATT_PROXY_STATUS
`0x80 0x66`	PRIVATE_NODE_IDENTITY_GET
`0x80 0x67`	PRIVATE_NODE_IDENTITY_SET
`0x80 0x68`	PRIVATE_NODE_IDENTITY_STATUS
`0x80 0x69`	ON_DEMAND_PRIVATE_PROXY_GET
`0x80 0x6A`	ON_DEMAND_PRIVATE_PROXY_SET
`0x80 0x6B`	ON_DEMAND_PRIVATE_PROXY_STATUS
`0x80 0x6C`	SAR_TRANSMITTER_GET
`0x80 0x6D`	SAR_TRANSMITTER_SET
`0x80 0x6E`	SAR_TRANSMITTER_STATUS
`0x80 0x6F`	SAR_RECEIVER_GET
`0x80 0x70`	SAR_RECEIVER_SET
`0x80 0x71`	SAR_RECEIVER_STATUS
`0x80 0x72`	OPCODES_AGGREGATOR_SEQUENCE
`0x80 0x73`	OPCODES_AGGREGATOR_STATUS
`0x80 0x74`	LARGE_COMPOSITION_DATA_GET
`0x80 0x75`	LARGE_COMPOSITION_DATA_STATUS
`0x80 0x76`	MODELS_METADATA_GET
`0x80 0x77`	MODELS_METADATA_STATUS
`0x80 0x78`	SOLICITATION_PDU_RPL_ITEM_CLEAR

`0x80 0x79`	SOLICITATION_PDU_RPL_ITEM_CLEAR_UNACKNOWLEDGED
`0x80 0x7A`	SOLICITATION_PDU_RPL_ITEM_STATUS
`0x80 0x7B`	DIRECTED_CONTROL_GET
`0x80 0x7C`	DIRECTED_CONTROL_SET
`0x80 0x7D`	DIRECTED_CONTROL_STATUS
`0x80 0x7E`	PATH_METRIC_GET
`0x80 0x7F`	PATH_METRIC_SET
`0x80 0x80`	PATH_METRIC_STATUS
`0x80 0x81`	DISCOVERY_TABLE_CAPABILITIES_GET
`0x80 0x82`	DISCOVERY_TABLE_CAPABILITIES_SET
`0x80 0x83`	DISCOVERY_TABLE_CAPABILITIES_STATUS
`0x80 0x84`	FORWARDING_TABLE_ADD
`0x80 0x85`	FORWARDING_TABLE_DELETE
`0x80 0x86`	FORWARDING_TABLE_STATUS
`0x80 0x87`	FORWARDING_TABLE_DEPENDENTS_ADD
`0x80 0x88`	FORWARDING_TABLE_DEPENDENTS_DELETE
`0x80 0x89`	FORWARDING_TABLE_DEPENDENTS_STATUS
`0x80 0x8A`	FORWARDING_TABLE_DEPENDENTS_GET
`0x80 0x8B`	FORWARDING_TABLE_DEPENDENTS_GET_STATUS
`0x80 0x8C`	FORWARDING_TABLE_ENTRIES_COUNT_GET
`0x80 0x8D`	FORWARDING_TABLE_ENTRIES_COUNT_STATUS
`0x80 0x8E`	FORWARDING_TABLE_ENTRIES_GET
`0x80 0x8F`	FORWARDING_TABLE_ENTRIES_STATUS
`0x80 0x90`	WANTED_LANES_GET
`0x80 0x91`	WANTED_LANES_SET
`0x80 0x92`	WANTED_LANES_STATUS
`0x80 0x93`	TWO_WAY_PATH_GET
`0x80 0x94`	TWO_WAY_PATH_SET
`0x80 0x95`	TWO_WAY_PATH_STATUS
`0x80 0x96`	PATH_ECHO_INTERVAL_GET
`0x80 0x97`	PATH_ECHO_INTERVAL_SET
`0x80 0x98`	PATH_ECHO_INTERVAL_STATUS
`0x80 0x99`	DIRECTED_NETWORK_TRANSMIT_GET
`0x80 0x9A`	DIRECTED_NETWORK_TRANSMIT_SET
`0x80 0x9B`	DIRECTED_NETWORK_TRANSMIT_STATUS
`0x80 0x9C`	DIRECTED_RELAY_RETRANSMIT_GET

`0x80 0x9D`	DIRECTED_RELAY_RETRANSMIT_SET
`0x80 0x9E`	DIRECTED_RELAY_RETRANSMIT_STATUS
`0x80 0x9F`	RSSI_THRESHOLD_GET
`0x80 0xA0`	RSSI_THRESHOLD_SET
`0x80 0xA1`	RSSI_THRESHOLD_STATUS
`0x80 0xA2`	DIRECTED_PATHS_GET
`0x80 0xA3`	DIRECTED_PATHS_STATUS
`0x80 0xA4`	DIRECTED_PUBLISH_POLICY_GET
`0x80 0xA5`	DIRECTED_PUBLISH_POLICY_SET
`0x80 0xA6`	DIRECTED_PUBLISH_POLICY_STATUS
`0x80 0xA7`	PATH_DISCOVERY_TIMING_CONTROL_GET
`0x80 0xA8`	PATH_DISCOVERY_TIMING_CONTROL_SET
`0x80 0xA9`	PATH_DISCOVERY_TIMING_CONTROL_STATUS
`0x80 0xAA`	this opcode is not used
`0x80 0xAB`	DIRECTED_CONTROL_NETWORK_TRANSMIT_GET
`0x80 0xAC`	DIRECTED_CONTROL_NETWORK_TRANSMIT_SET
`0x80 0xAD`	DIRECTED_CONTROL_NETWORK_TRANSMIT_STATUS
`0x80 0xAE`	DIRECTED_CONTROL_RELAY_RETRANSMIT_GET
`0x80 0xAF`	DIRECTED_CONTROL_RELAY_RETRANSMIT_SET
`0x80 0xB0`	DIRECTED_CONTROL_RELAY_RETRANSMIT_STATUS
`0x80 0xB1`	SUBNET_BRIDGE_GET
`0x80 0xB2`	SUBNET_BRIDGE_SET
`0x80 0xB3`	SUBNET_BRIDGE_STATUS
`0x80 0xB4`	BRIDGING_TABLE_ADD
`0x80 0xB5`	BRIDGING_TABLE_REMOVE
`0x80 0xB6`	BRIDGING_TABLE_STATUS
`0x80 0xB7`	BRIDGED_SUBNETS_GET
`0x80 0xB8`	BRIDGED_SUBNETS_LIST
`0x80 0xB9`	BRIDGING_TABLE_GET
`0x80 0xBA`	BRIDGING_TABLE_LIST
`0x80 0xBB`	BRIDGING_TABLE_SIZE_GET
`0x80 0xBC`	BRIDGING_TABLE_SIZE_STATUS
`0x82 0x01`	Generic OnOff Get
`0x82 0x02`	Generic OnOff Set
`0x82 0x03`	Generic OnOff Set Unacknowledged
`0x82 0x04`	Generic OnOff Status

`0x82 0x05`	Generic Level Get
`0x82 0x06`	Generic Level Set
`0x82 0x07`	Generic Level Set Unacknowledged
`0x82 0x08`	Generic Level Status
`0x82 0x09`	Generic Delta Set
`0x82 0x0A`	Generic Delta Set Unacknowledged
`0x82 0x0B`	Generic Move Set
`0x82 0x0C`	Generic Move Set Unacknowledged
`0x82 0x0D`	Generic Default Transition Time Get
`0x82 0x0E`	Generic Default Transition Time Set
`0x82 0x0F`	Generic Default Transition Time Set Unacknowledged
`0x82 0x10`	Generic Default Transition Time Status
`0x82 0x11`	Generic OnPowerUp Get
`0x82 0x12`	Generic OnPowerUp Status
`0x82 0x13`	Generic OnPowerUp Set
`0x82 0x14`	Generic OnPowerUp Set Unacknowledged
`0x82 0x15`	Generic Power Level Get
`0x82 0x16`	Generic Power Level Set
`0x82 0x17`	Generic Power Level Set Unacknowledged
`0x82 0x18`	Generic Power Level Status
`0x82 0x19`	Generic Power Last Get
`0x82 0x1A`	Generic Power Last Status
`0x82 0x1B`	Generic Power Default Get
`0x82 0x1C`	Generic Power Default Status
`0x82 0x1D`	Generic Power Range Get
`0x82 0x1E`	Generic Power Range Status
`0x82 0x1F`	Generic Power Default Set
`0x82 0x20`	Generic Power Default Set Unacknowledged
`0x82 0x21`	Generic Power Range Set
`0x82 0x22`	Generic Power Range Set Unacknowledged
`0x82 0x23`	Generic Battery Get
`0x82 0x24`	Generic Battery Status
`0x82 0x25`	Generic Location Global Get
`0x82 0x26`	Generic Location Local Get
`0x82 0x27`	Generic Location Local Status
`0x82 0x28`	Generic Location Local Set

0x82 0x29	Generic Location Local Set Unacknowledged
0x82 0x2A	Generic Manufacturer Properties Get
0x82 0x2B	Generic Manufacturer Property Get
0x82 0x2C	Generic Admin Properties Get
0x82 0x2D	Generic Admin Property Get
0x82 0x2E	Generic User Properties Get
0x82 0x2F	Generic User Property Get
0x82 0x30	Sensor Descriptor Get
0x82 0x31	Sensor Get
0x82 0x32	Sensor Column Get
0x82 0x33	Sensor Series Get
0x82 0x34	Sensor Cadence Get
0x82 0x35	Sensor Settings Get
0x82 0x36	Sensor Setting Get
0x82 0x37	Time Get
0x82 0x38	Time Role Get
0x82 0x39	Time Role Set
0x82 0x3A	Time Role Status
0x82 0x3B	Time Zone Get
0x82 0x3C	Time Zone Set
0x82 0x3D	Time Zone Status
0x82 0x3E	TAI-UTC Delta Get
0x82 0x3F	TAI-UTC Delta Set
0x82 0x40	TAI-UTC Delta Status
0x82 0x41	Scene Get
0x82 0x42	Scene Recall
0x82 0x43	Scene Recall Unacknowledged
0x82 0x44	Scene Register Get
0x82 0x45	Scene Register Status
0x82 0x46	Scene Store
0x82 0x47	Scene Store Unacknowledged
0x82 0x48	Scheduler Action Get
0x82 0x49	Scheduler Get
0x82 0x4A	Scheduler Status
0x82 0x4B	Light Lightness Get
0x82 0x4C	Light Lightness Set

`0x82 0x4D`	Light Lightness Set Unacknowledged
`0x82 0x4E`	Light Lightness Status
`0x82 0x4F`	Light Lightness Linear Get
`0x82 0x50`	Light Lightness Linear Set
`0x82 0x51`	Light Lightness Linear Set Unacknowledged
`0x82 0x52`	Light Lightness Linear Status
`0x82 0x53`	Light Lightness Last Get
`0x82 0x54`	Light Lightness Last Status
`0x82 0x55`	Light Lightness Default Get
`0x82 0x56`	Light Lightness Default Status
`0x82 0x57`	Light Lightness Range Get
`0x82 0x58`	Light Lightness Range Status
`0x82 0x59`	Light Lightness Default Set
`0x82 0x5A`	Light Lightness Default Set Unacknowledged
`0x82 0x5B`	Light Lightness Range Set
`0x82 0x5C`	Light Lightness Range Set Unacknowledged
`0x82 0x5D`	Light CTL Get
`0x82 0x5E`	Light CTL Set
`0x82 0x5F`	Light CTL Set Unacknowledged
`0x82 0x60`	Light CTL Status
`0x82 0x61`	Light CTL Temperature Get
`0x82 0x62`	Light CTL Temperature Range Get
`0x82 0x63`	Light CTL Temperature Range Status
`0x82 0x64`	Light CTL Temperature Set
`0x82 0x65`	Light CTL Temperature Set Unacknowledged
`0x82 0x66`	Light CTL Temperature Status
`0x82 0x67`	Light CTL Default Get
`0x82 0x68`	Light CTL Default Status
`0x82 0x69`	Light CTL Default Set
`0x82 0x6A`	Light CTL Default Set Unacknowledged
`0x82 0x6B`	Light CTL Temperature Range Set
`0x82 0x6C`	Light CTL Temperature Range Set Unacknowledged
`0x82 0x6D`	Light HSL Get
`0x82 0x6E`	Light HSL Hue Get
`0x82 0x6F`	Light HSL Hue Set
`0x82 0x70`	Light HSL Hue Set Unacknowledged

0x82 0x71	Light HSL Hue Status
0x82 0x72	Light HSL Saturation Get
0x82 0x73	Light HSL Saturation Set
0x82 0x74	Light HSL Saturation Set Unacknowledged
0x82 0x75	Light HSL Saturation Status
0x82 0x76	Light HSL Set
0x82 0x77	Light HSL Set Unacknowledged
0x82 0x78	Light HSL Status
0x82 0x79	Light HSL Target Get
0x82 0x7A	Light HSL Target Status
0x82 0x7B	Light HSL Default Get
0x82 0x7C	Light HSL Default Status
0x82 0x7D	Light HSL Range Get
0x82 0x7E	Light HSL Range Status
0x82 0x7F	Light HSL Default Set
0x82 0x80	Light HSL Default Set Unacknowledged
0x82 0x81	Light HSL Range Set
0x82 0x82	Light HSL Range Set Unacknowledged
0x82 0x83	Light xyL Get
0x82 0x84	Light xyL Set
0x82 0x85	Light xyL Set Unacknowledged
0x82 0x86	Light xyL Status
0x82 0x87	Light xyL Target Get
0x82 0x88	Light xyL Target Status
0x82 0x89	Light xyL Default Get
0x82 0x8A	Light xyL Default Status
0x82 0x8B	Light xyL Range Get
0x82 0x8C	Light xyL Range Status
0x82 0x8D	Light xyL Default Set
0x82 0x8E	Light xyL Default Set Unacknowledged
0x82 0x8F	Light xyL Range Set
0x82 0x90	Light xyL Range Set Unacknowledged
0x82 0x91	Light LC Mode Get
0x82 0x92	Light LC Mode Set
0x82 0x93	Light LC Mode Set Unacknowledged
0x82 0x94	Light LC Mode Status

0x82 0x95	Light LC OM Get
0x82 0x96	Light LC OM Set
0x82 0x97	Light LC OM Set Unacknowledged
0x82 0x98	Light LC OM Status
0x82 0x99	Light LC Light OnOff Get
0x82 0x9A	Light LC Light OnOff Set
0x82 0x9B	Light LC Light OnOff Set Unacknowledged
0x82 0x9C	Light LC Light OnOff Status
0x82 0x9D	Light LC Property Get
0x82 0x9E	Scene Delete
0x82 0x9F	Scene Delete Unacknowledged
0x83 0x00	BLOB Transfer Get
0x83 0x01	BLOB Transfer Start
0x83 0x02	BLOB Transfer Cancel
0x83 0x03	BLOB Transfer Status
0x83 0x04	BLOB Block Start
0x83 0x05	BLOB Block Get
0x83 0x06	BLOB Information Get
0x83 0x07	BLOB Information Status
0x83 0x08	Firmware Update Information Get
0x83 0x09	Firmware Update Information Status
0x83 0x0A	Firmware Update Firmware Metadata Check
0x83 0x0B	Firmware Update Firmware Metadata Status
0x83 0x0C	Firmware Update Get
0x83 0x0D	Firmware Update Start
0x83 0x0E	Firmware Update Cancel
0x83 0x0F	Firmware Update Apply
0x83 0x10	Firmware Update Status
0x83 0x11	Firmware Distribution Receivers Add
0x83 0x12	Firmware Distribution Receivers Delete All
0x83 0x13	Firmware Distribution Receivers Status
0x83 0x14	Firmware Distribution Receivers Get
0x83 0x15	Firmware Distribution Receivers List
0x83 0x16	Firmware Distribution Capabilities Get
0x83 0x17	Firmware Distribution Capabilities Status
0x83 0x18	Firmware Distribution Get

`0x83 0x19`	Firmware Distribution Start
`0x83 0x1A`	Firmware Distribution Suspend
`0x83 0x1B`	Firmware Distribution Cancel
`0x83 0x1C`	Firmware Distribution Apply
`0x83 0x1D`	Firmware Distribution Status
`0x83 0x1E`	Firmware Distribution Upload Get
`0x83 0x1F`	Firmware Distribution Upload Start
`0x83 0x20`	Firmware Distribution Upload OOB Start
`0x83 0x21`	Firmware Distribution Upload Cancel
`0x83 0x22`	Firmware Distribution Upload Status
`0x83 0x23`	Firmware Distribution Firmware Get
`0x83 0x24`	Firmware Distribution Firmware Get By Index
`0x83 0x25`	Firmware Distribution Firmware Delete
`0x83 0x26`	Firmware Distribution Firmware Delete All
`0x83 0x27`	Firmware Distribution Firmware Status

4.2.2 Mesh Model Message Opcodes by Name

The table below lists the assigned numbers for model message opcodes organized by message name.

Last Modified: 2023-09-13

Filenames: assigned_numbers/mesh/mmdl_opcodes.yaml, assigned_numbers/mesh/mesh_op-codes.yaml, assigned_numbers/mesh/dfumbt_opcodes.yaml

Message Name	Message Opcode
BLOB Block Get	`0x83 0x05`
BLOB Block Start	`0x83 0x04`
BLOB Block Status	`0x67`
BLOB Chunk Transfer	`0x66`
BLOB Information Get	`0x83 0x06`
BLOB Information Status	`0x83 0x07`
BLOB Partial Block Report	`0x68`
BLOB Transfer Cancel	`0x83 0x02`
BLOB Transfer Get	`0x83 0x00`
BLOB Transfer Start	`0x83 0x01`
BLOB Transfer Status	`0x83 0x03`
BRIDGED_SUBNETS_GET	`0x80 0xB7`
BRIDGED_SUBNETS_LIST	`0x80 0xB8`

BRIDGING_TABLE_ADD	`0x80 0xB4`
BRIDGING_TABLE_GET	`0x80 0xB9`
BRIDGING_TABLE_LIST	`0x80 0xBA`
BRIDGING_TABLE_REMOVE	`0x80 0xB5`
BRIDGING_TABLE_SIZE_GET	`0x80 0xBB`
BRIDGING_TABLE_SIZE_STATUS	`0x80 0xBC`
BRIDGING_TABLE_STATUS	`0x80 0xB6`
Config AppKey Add	`0x00`
Config AppKey Delete	`0x80 0x00`
Config AppKey Get	`0x80 0x01`
Config AppKey List	`0x80 0x02`
Config AppKey Status	`0x80 0x03`
Config AppKey Update	`0x01`
Config Beacon Get	`0x80 0x09`
Config Beacon Set	`0x80 0x0A`
Config Beacon Status	`0x80 0x0B`
Config Composition Data Get	`0x80 0x08`
Config Composition Data Status	`0x02`
Config Default TTL Get	`0x80 0x0C`
Config Default TTL Set	`0x80 0x0D`
Config Default TTL Status	`0x80 0x0E`
Config Friend Get	`0x80 0x0F`
Config Friend Set	`0x80 0x10`
Config Friend Status	`0x80 0x11`
Config GATT Proxy Get	`0x80 0x12`
Config GATT Proxy Set	`0x80 0x13`
Config GATT Proxy Status	`0x80 0x14`
Config Heartbeat Publication Get	`0x80 0x38`
Config Heartbeat Publication Set	`0x80 0x39`
Config Heartbeat Publication Status	`0x06`
Config Heartbeat Subscription Get	`0x80 0x3A`
Config Heartbeat Subscription Set	`0x80 0x3B`
Config Heartbeat Subscription Status	`0x80 0x3C`
Config Key Refresh Phase Get	`0x80 0x15`
Config Key Refresh Phase Set	`0x80 0x16`
Config Key Refresh Phase Status	`0x80 0x17`

Config Low Power Node PollTimeout Get	`0x80 0x2D`
Config Low Power Node PollTimeout Status	`0x80 0x2E`
Config Model App Bind	`0x80 0x3D`
Config Model App Status	`0x80 0x3E`
Config Model App Unbind	`0x80 0x3F`
Config Model Publication Get	`0x80 0x18`
Config Model Publication Set	`0x03`
Config Model Publication Status	`0x80 0x19`
Config Model Publication Virtual Address Set	`0x80 0x1A`
Config Model Subscription Add	`0x80 0x1B`
Config Model Subscription Delete	`0x80 0x1C`
Config Model Subscription Delete All	`0x80 0x1D`
Config Model Subscription Overwrite	`0x80 0x1E`
Config Model Subscription Status	`0x80 0x1F`
Config Model Subscription Virtual Address Add	`0x80 0x20`
Config Model Subscription Virtual Address Delete	`0x80 0x21`
Config Model Subscription Virtual Address Overwrite	`0x80 0x22`
Config NetKey Add	`0x80 0x40`
Config NetKey Delete	`0x80 0x41`
Config NetKey Get	`0x80 0x42`
Config NetKey List	`0x80 0x43`
Config NetKey Status	`0x80 0x44`
Config NetKey Update	`0x80 0x45`
Config Network Transmit Get	`0x80 0x23`
Config Network Transmit Set	`0x80 0x24`
Config Network Transmit Status	`0x80 0x25`
Config Node Identity Get	`0x80 0x46`
Config Node Identity Set	`0x80 0x47`
Config Node Identity Status	`0x80 0x48`
Config Node Reset	`0x80 0x49`
Config Node Reset Status	`0x80 0x4A`
Config Relay Get	`0x80 0x26`
Config Relay Set	`0x80 0x27`
Config Relay Status	`0x80 0x28`
Config SIG Model App Get	`0x80 0x4B`
Config SIG Model App List	`0x80 0x4C`

Config SIG Model Subscription Get	0x80 0x29
Config SIG Model Subscription List	0x80 0x2A
Config Vendor Model App Get	0x80 0x4D
Config Vendor Model App List	0x80 0x4E
Config Vendor Model Subscription Get	0x80 0x2B
Config Vendor Model Subscription List	0x80 0x2C
DIRECTED_CONTROL_GET	0x80 0x7B
DIRECTED_CONTROL_NETWORK_TRANSMIT_GET	0x80 0xAB
DIRECTED_CONTROL_NETWORK_TRANSMIT_SET	0x80 0xAC
DIRECTED_CONTROL_NETWORK_TRANSMIT_STATUS	0x80 0xAD
DIRECTED_CONTROL_RELAY_RETRANSMIT_GET	0x80 0xAE
DIRECTED_CONTROL_RELAY_RETRANSMIT_SET	0x80 0xAF
DIRECTED_CONTROL_RELAY_RETRANSMIT_STATUS	0x80 0xB0
DIRECTED_CONTROL_SET	0x80 0x7C
DIRECTED_CONTROL_STATUS	0x80 0x7D
DIRECTED_NETWORK_TRANSMIT_GET	0x80 0x99
DIRECTED_NETWORK_TRANSMIT_SET	0x80 0x9A
DIRECTED_NETWORK_TRANSMIT_STATUS	0x80 0x9B
DIRECTED_PATHS_GET	0x80 0xA2
DIRECTED_PATHS_STATUS	0x80 0xA3
DIRECTED_PUBLISH_POLICY_GET	0x80 0xA4
DIRECTED_PUBLISH_POLICY_SET	0x80 0xA5
DIRECTED_PUBLISH_POLICY_STATUS	0x80 0xA6
DIRECTED_RELAY_RETRANSMIT_GET	0x80 0x9C
DIRECTED_RELAY_RETRANSMIT_SET	0x80 0x9D
DIRECTED_RELAY_RETRANSMIT_STATUS	0x80 0x9E
DISCOVERY_TABLE_CAPABILITIES_GET	0x80 0x81
DISCOVERY_TABLE_CAPABILITIES_SET	0x80 0x82
DISCOVERY_TABLE_CAPABILITIES_STATUS	0x80 0x83
FORWARDING_TABLE_ADD	0x80 0x84
FORWARDING_TABLE_DELETE	0x80 0x85
FORWARDING_TABLE_DEPENDENTS_ADD	0x80 0x87
FORWARDING_TABLE_DEPENDENTS_DELETE	0x80 0x88
FORWARDING_TABLE_DEPENDENTS_GET	0x80 0x8A
FORWARDING_TABLE_DEPENDENTS_GET_STATUS	0x80 0x8B
FORWARDING_TABLE_DEPENDENTS_STATUS	0x80 0x89

FORWARDING_TABLE_ENTRIES_COUNT_GET	`0x80 0x8C`
FORWARDING_TABLE_ENTRIES_COUNT_STATUS	`0x80 0x8D`
FORWARDING_TABLE_ENTRIES_GET	`0x80 0x8E`
FORWARDING_TABLE_ENTRIES_STATUS	`0x80 0x8F`
FORWARDING_TABLE_STATUS	`0x80 0x86`
Firmware Distribution Apply	`0x83 0x1C`
Firmware Distribution Cancel	`0x83 0x1B`
Firmware Distribution Capabilities Get	`0x83 0x16`
Firmware Distribution Capabilities Status	`0x83 0x17`
Firmware Distribution Firmware Delete	`0x83 0x25`
Firmware Distribution Firmware Delete All	`0x83 0x26`
Firmware Distribution Firmware Get	`0x83 0x23`
Firmware Distribution Firmware Get By Index	`0x83 0x24`
Firmware Distribution Firmware Status	`0x83 0x27`
Firmware Distribution Get	`0x83 0x18`
Firmware Distribution Receivers Add	`0x83 0x11`
Firmware Distribution Receivers Delete All	`0x83 0x12`
Firmware Distribution Receivers Get	`0x83 0x14`
Firmware Distribution Receivers List	`0x83 0x15`
Firmware Distribution Receivers Status	`0x83 0x13`
Firmware Distribution Start	`0x83 0x19`
Firmware Distribution Status	`0x83 0x1D`
Firmware Distribution Suspend	`0x83 0x1A`
Firmware Distribution Upload Cancel	`0x83 0x21`
Firmware Distribution Upload Get	`0x83 0x1E`
Firmware Distribution Upload OOB Start	`0x83 0x20`
Firmware Distribution Upload Start	`0x83 0x1F`
Firmware Distribution Upload Status	`0x83 0x22`
Firmware Update Apply	`0x83 0x0F`
Firmware Update Cancel	`0x83 0x0E`
Firmware Update Firmware Metadata Check	`0x83 0x0A`
Firmware Update Firmware Metadata Status	`0x83 0x0B`
Firmware Update Get	`0x83 0x0C`
Firmware Update Information Get	`0x83 0x08`
Firmware Update Information Status	`0x83 0x09`
Firmware Update Start	`0x83 0x0D`

Firmware Update Status	0x83 0x10
Generic Admin Properties Get	0x82 0x2C
Generic Admin Properties Status	0x47
Generic Admin Property Get	0x82 0x2D
Generic Admin Property Set	0x48
Generic Admin Property Set Unacknowledged	0x49
Generic Admin Property Status	0x4A
Generic Battery Get	0x82 0x23
Generic Battery Status	0x82 0x24
Generic Client Properties Get	0x4F
Generic Client Properties Status	0x50
Generic Default Transition Time Get	0x82 0x0D
Generic Default Transition Time Set	0x82 0x0E
Generic Default Transition Time Set Unacknowledged	0x82 0x0F
Generic Default Transition Time Status	0x82 0x10
Generic Delta Set	0x82 0x09
Generic Delta Set Unacknowledged	0x82 0x0A
Generic Level Get	0x82 0x05
Generic Level Set	0x82 0x06
Generic Level Set Unacknowledged	0x82 0x07
Generic Level Status	0x82 0x08
Generic Location Global Get	0x82 0x25
Generic Location Global Set	0x41
Generic Location Global Set Unacknowledged	0x42
Generic Location Global Status	0x40
Generic Location Local Get	0x82 0x26
Generic Location Local Set	0x82 0x28
Generic Location Local Set Unacknowledged	0x82 0x29
Generic Location Local Status	0x82 0x27
Generic Manufacturer Properties Get	0x82 0x2A
Generic Manufacturer Properties Status	0x43
Generic Manufacturer Property Get	0x82 0x2B
Generic Manufacturer Property Set	0x44
Generic Manufacturer Property Set Unacknowledged	0x45
Generic Manufacturer Property Status	0x46
Generic Move Set	0x82 0x0B

Generic Move Set Unacknowledged	0x82 0x0C
Generic OnOff Get	0x82 0x01
Generic OnOff Set	0x82 0x02
Generic OnOff Set Unacknowledged	0x82 0x03
Generic OnOff Status	0x82 0x04
Generic OnPowerUp Get	0x82 0x11
Generic OnPowerUp Set	0x82 0x13
Generic OnPowerUp Set Unacknowledged	0x82 0x14
Generic OnPowerUp Status	0x82 0x12
Generic Power Default Get	0x82 0x1B
Generic Power Default Set	0x82 0x1F
Generic Power Default Set Unacknowledged	0x82 0x20
Generic Power Default Status	0x82 0x1C
Generic Power Last Get	0x82 0x19
Generic Power Last Status	0x82 0x1A
Generic Power Level Get	0x82 0x15
Generic Power Level Set	0x82 0x16
Generic Power Level Set Unacknowledged	0x82 0x17
Generic Power Level Status	0x82 0x18
Generic Power Range Get	0x82 0x1D
Generic Power Range Set	0x82 0x21
Generic Power Range Set Unacknowledged	0x82 0x22
Generic Power Range Status	0x82 0x1E
Generic User Properties Get	0x82 0x2E
Generic User Properties Status	0x4B
Generic User Property Get	0x82 0x2F
Generic User Property Set	0x4C
Generic User Property Set Unacknowledged	0x4D
Generic User Property Status	0x4E
Health Attention Get	0x80 0x04
Health Attention Set	0x80 0x05
Health Attention Set Unacknowledged	0x80 0x06
Health Attention Status	0x80 0x07
Health Current Status	0x04
Health Fault Clear	0x80 0x2F
Health Fault Clear Unacknowledged	0x80 0x30

Health Fault Get	0x80 0x31
Health Fault Status	0x05
Health Fault Test	0x80 0x32
Health Fault Test Unacknowledged	0x80 0x33
Health Period Get	0x80 0x34
Health Period Set	0x80 0x35
Health Period Set Unacknowledged	0x80 0x36
Health Period Status	0x80 0x37
IEC 62386-104 Frame	0x65
LARGE_COMPOSITION_DATA_GET	0x80 0x74
LARGE_COMPOSITION_DATA_STATUS	0x80 0x75
Light CTL Default Get	0x82 0x67
Light CTL Default Set	0x82 0x69
Light CTL Default Set Unacknowledged	0x82 0x6A
Light CTL Default Status	0x82 0x68
Light CTL Get	0x82 0x5D
Light CTL Set	0x82 0x5E
Light CTL Set Unacknowledged	0x82 0x5F
Light CTL Status	0x82 0x60
Light CTL Temperature Get	0x82 0x61
Light CTL Temperature Range Get	0x82 0x62
Light CTL Temperature Range Set	0x82 0x6B
Light CTL Temperature Range Set Unacknowledged	0x82 0x6C
Light CTL Temperature Range Status	0x82 0x63
Light CTL Temperature Set	0x82 0x64
Light CTL Temperature Set Unacknowledged	0x82 0x65
Light CTL Temperature Status	0x82 0x66
Light HSL Default Get	0x82 0x7B
Light HSL Default Set	0x82 0x7F
Light HSL Default Set Unacknowledged	0x82 0x80
Light HSL Default Status	0x82 0x7C
Light HSL Get	0x82 0x6D
Light HSL Hue Get	0x82 0x6E
Light HSL Hue Set	0x82 0x6F
Light HSL Hue Set Unacknowledged	0x82 0x70
Light HSL Hue Status	0x82 0x71

Light HSL Range Get	0x82 0x7D
Light HSL Range Set	0x82 0x81
Light HSL Range Set Unacknowledged	0x82 0x82
Light HSL Range Status	0x82 0x7E
Light HSL Saturation Get	0x82 0x72
Light HSL Saturation Set	0x82 0x73
Light HSL Saturation Set Unacknowledged	0x82 0x74
Light HSL Saturation Status	0x82 0x75
Light HSL Set	0x82 0x76
Light HSL Set Unacknowledged	0x82 0x77
Light HSL Status	0x82 0x78
Light HSL Target Get	0x82 0x79
Light HSL Target Status	0x82 0x7A
Light LC Light OnOff Get	0x82 0x99
Light LC Light OnOff Set	0x82 0x9A
Light LC Light OnOff Set Unacknowledged	0x82 0x9B
Light LC Light OnOff Status	0x82 0x9C
Light LC Mode Get	0x82 0x91
Light LC Mode Set	0x82 0x92
Light LC Mode Set Unacknowledged	0x82 0x93
Light LC Mode Status	0x82 0x94
Light LC OM Get	0x82 0x95
Light LC OM Set	0x82 0x96
Light LC OM Set Unacknowledged	0x82 0x97
Light LC OM Status	0x82 0x98
Light LC Property Get	0x82 0x9D
Light LC Property Set	0x62
Light LC Property Set Unacknowledged	0x63
Light LC Property Status	0x64
Light Lightness Default Get	0x82 0x55
Light Lightness Default Set	0x82 0x59
Light Lightness Default Set Unacknowledged	0x82 0x5A
Light Lightness Default Status	0x82 0x56
Light Lightness Get	0x82 0x4B
Light Lightness Last Get	0x82 0x53
Light Lightness Last Status	0x82 0x54

Light Lightness Linear Get	0x82 0x4F
Light Lightness Linear Set	0x82 0x50
Light Lightness Linear Set Unacknowledged	0x82 0x51
Light Lightness Linear Status	0x82 0x52
Light Lightness Range Get	0x82 0x57
Light Lightness Range Set	0x82 0x5B
Light Lightness Range Set Unacknowledged	0x82 0x5C
Light Lightness Range Status	0x82 0x58
Light Lightness Set	0x82 0x4C
Light Lightness Set Unacknowledged	0x82 0x4D
Light Lightness Status	0x82 0x4E
Light xyL Default Get	0x82 0x89
Light xyL Default Set	0x82 0x8D
Light xyL Default Set Unacknowledged	0x82 0x8E
Light xyL Default Status	0x82 0x8A
Light xyL Get	0x82 0x83
Light xyL Range Get	0x82 0x8B
Light xyL Range Set	0x82 0x8F
Light xyL Range Set Unacknowledged	0x82 0x90
Light xyL Range Status	0x82 0x8C
Light xyL Set	0x82 0x84
Light xyL Set Unacknowledged	0x82 0x85
Light xyL Status	0x82 0x86
Light xyL Target Get	0x82 0x87
Light xyL Target Status	0x82 0x88
MODELS_METADATA_GET	0x80 0x76
MODELS_METADATA_STATUS	0x80 0x77
ON_DEMAND_PRIVATE_PROXY_GET	0x80 0x69
ON_DEMAND_PRIVATE_PROXY_SET	0x80 0x6A
ON_DEMAND_PRIVATE_PROXY_STATUS	0x80 0x6B
OPCODES_AGGREGATOR_SEQUENCE	0x80 0x72
OPCODES_AGGREGATOR_STATUS	0x80 0x73
PATH_DISCOVERY_TIMING_CONTROL_GET	0x80 0xA7
PATH_DISCOVERY_TIMING_CONTROL_SET	0x80 0xA8
PATH_DISCOVERY_TIMING_CONTROL_STATUS	0x80 0xA9
PATH_ECHO_INTERVAL_GET	0x80 0x96

PATH_ECHO_INTERVAL_SET	0x80 0x97
PATH_ECHO_INTERVAL_STATUS	0x80 0x98
PATH_METRIC_GET	0x80 0x7E
PATH_METRIC_SET	0x80 0x7F
PATH_METRIC_STATUS	0x80 0x80
PRIVATE_BEACON_GET	0x80 0x60
PRIVATE_BEACON_SET	0x80 0x61
PRIVATE_BEACON_STATUS	0x80 0x62
PRIVATE_GATT_PROXY_GET	0x80 0x63
PRIVATE_GATT_PROXY_SET	0x80 0x64
PRIVATE_GATT_PROXY_STATUS	0x80 0x65
PRIVATE_NODE_IDENTITY_GET	0x80 0x66
PRIVATE_NODE_IDENTITY_SET	0x80 0x67
PRIVATE_NODE_IDENTITY_STATUS	0x80 0x68
RSSI_THRESHOLD_GET	0x80 0x9F
RSSI_THRESHOLD_SET	0x80 0xA0
RSSI_THRESHOLD_STATUS	0x80 0xA1
Remote Provisioning Extended Scan Report	0x80 0x57
Remote Provisioning Extended Scan Start	0x80 0x56
Remote Provisioning Link Close	0x80 0x5A
Remote Provisioning Link Get	0x80 0x58
Remote Provisioning Link Open	0x80 0x59
Remote Provisioning Link Report	0x80 0x5C
Remote Provisioning Link Status	0x80 0x5B
Remote Provisioning PDU Outbound Report	0x80 0x5E
Remote Provisioning PDU Report	0x80 0x5F
Remote Provisioning PDU Send	0x80 0x5D
Remote Provisioning Scan Capabilities Get	0x80 0x4F
Remote Provisioning Scan Capabilities Status	0x80 0x50
Remote Provisioning Scan Get	0x80 0x51
Remote Provisioning Scan Report	0x80 0x55
Remote Provisioning Scan Start	0x80 0x52
Remote Provisioning Scan Status	0x80 0x54
Remote Provisioning Scan Stop	0x80 0x53
SAR_RECEIVER_GET	0x80 0x6F
SAR_RECEIVER_SET	0x80 0x70

SAR_RECEIVER_STATUS	0x80 0x71
SAR_TRANSMITTER_GET	0x80 0x6C
SAR_TRANSMITTER_SET	0x80 0x6D
SAR_TRANSMITTER_STATUS	0x80 0x6E
SOLICITATION_PDU_RPL_ITEM_CLEAR	0x80 0x78
SOLICITATION_PDU_RPL_ITEM_CLEAR_UNACKNOWLEDGED	0x80 0x79
SOLICITATION_PDU_RPL_ITEM_STATUS	0x80 0x7A
SUBNET_BRIDGE_GET	0x80 0xB1
SUBNET_BRIDGE_SET	0x80 0xB2
SUBNET_BRIDGE_STATUS	0x80 0xB3
Scene Delete	0x82 0x9E
Scene Delete Unacknowledged	0x82 0x9F
Scene Get	0x82 0x41
Scene Recall	0x82 0x42
Scene Recall Unacknowledged	0x82 0x43
Scene Register Get	0x82 0x44
Scene Register Status	0x82 0x45
Scene Status	0x5E
Scene Store	0x82 0x46
Scene Store Unacknowledged	0x82 0x47
Scheduler Action Get	0x82 0x48
Scheduler Action Set	0x60
Scheduler Action Set Unacknowledged	0x61
Scheduler Action Status	0x5F
Scheduler Get	0x82 0x49
Scheduler Status	0x82 0x4A
Sensor Cadence Get	0x82 0x34
Sensor Cadence Set	0x55
Sensor Cadence Set Unacknowledged	0x56
Sensor Cadence Status	0x57
Sensor Column Get	0x82 0x32
Sensor Column Status	0x53
Sensor Descriptor Get	0x82 0x30
Sensor Descriptor Status	0x51
Sensor Get	0x82 0x31
Sensor Series Get	0x82 0x33

Sensor Series Status	0x54
Sensor Setting Get	0x82 0x36
Sensor Setting Set	0x59
Sensor Setting Set Unacknowledged	0x5A
Sensor Setting Status	0x5B
Sensor Settings Get	0x82 0x35
Sensor Settings Status	0x58
Sensor Status	0x52
TAI-UTC Delta Get	0x82 0x3E
TAI-UTC Delta Set	0x82 0x3F
TAI-UTC Delta Status	0x82 0x40
TWO_WAY_PATH_GET	0x80 0x93
TWO_WAY_PATH_SET	0x80 0x94
TWO_WAY_PATH_STATUS	0x80 0x95
Time Get	0x82 0x37
Time Role Get	0x82 0x38
Time Role Set	0x82 0x39
Time Role Status	0x82 0x3A
Time Set	0x5C
Time Status	0x5D
Time Zone Get	0x82 0x3B
Time Zone Set	0x82 0x3C
Time Zone Status	0x82 0x3D
WANTED_LANES_GET	0x80 0x90
WANTED_LANES_SET	0x80 0x91
WANTED_LANES_STATUS	0x80 0x92
this opcode is not used	0x80 0xAA

4.3 Mesh Protocol

The following section includes the assigned numbers used in the Mesh Protocol specification [17] [18].

4.3.1 Mesh Beacon Types

The table below lists the assigned numbers for beacon types.

Last Modified: 2023-09-13

Filename: assigned_numbers/mesh/mesh_beacon_types.yaml

Value	Definition
0x00	Unprovisioned Device beacon
0x01	Secure Network beacon
0x02	Mesh Private beacon

4.3.2 Mesh Transport Control Message Opcodes

The table below lists the assigned numbers for Transport Control message opcodes.

Last Modified: 2023-09-13

Filename: assigned_numbers/mesh/mesh_transport_control_opcodes.yaml

Opcode	Name	Description
0x00	–	Reserved for the lower transport layer.
0x01	Friend Poll	Sent by a Low Power node to its Friend node to request any messages that it has stored for the Low Power node.
0x02	Friend Update	Sent by a Friend node to a Low Power node to inform it about security updates.
0x03	Friend Request	Sent by a Low Power node to the all-friends fixed group address to initiate a search for a friend.
0x04	Friend Offer	Sent by a Friend node to a Low Power node to offer to become its friend.
0x05	Friend Clear	Sent to a Friend node to inform a previous friend of a Low Power node about the removal of a friendship.
0x06	Friend Clear Confirm	Sent from a previous friend to the Friend node to confirm that a prior friend relationship has been removed.
0x07	Friend Subscription List Add	Sent to a Friend node to add one or more addresses to the Friend Subscription List.

0x08	Friend Subscription List Remove	Sent to a Friend node to remove one or more addresses from the Friend Subscription List.
0x09	Friend Subscription List Confirm	Sent by a Friend node to confirm Friend Subscription List updates.
0x0A	Heartbeat	Sent by a node to let other nodes determine topology of a subnet.
0x0B	PATH_REQUEST	Sent by a Path Origin or by a Directed Relay node to discover a path to a destination.
0x0C	PATH_REPLY	Sent by a Path Target or by a Directed Relay node to establish a path from a Path Origin to a Path Target.
0x0D	PATH_CONFIRMATION	Sent by a Path Origin or by a Directed Relay node to confirm that a two-way path has been established from the Path Origin to a Path Target.
0x0E	PATH_ECHO_REQUEST	Sent by a Path Origin to validate a path from the Path Origin to a destination.
0x0F	PATH_ECHO_REPLY	Sent by a Path Target in order to confirm that a path exists from a Path Origin to the destination.
0x10	DEPENDENT_NODE_UPDATE	Sent by a path endpoint or a Directed Relay node to notify nodes in a subnet that element addresses of a dependent node are to be added to or removed from the Forwarding Table.
0x11	PATH_REQUEST_SOLICITATION	Sent by a Directed Forwarding node or a Configuration Manager to solicit the discovery of paths toward unicast addresses, group addresses, or virtual addresses.

4.3.3 Mesh Provisioning PDU Types

The table below lists the assigned numbers for Provisioning PDU types.

Last Modified: 2023-09-13

Filename: assigned_numbers/mesh/mesh_provisioning_pdu_types.yaml

Value	Name	Description
0x00	Provisioning Invite	Invites an unprovisioned device (the intended Provisionee) to join a mesh network

0x01	Provisioning Capabilities	Indicates the capabilities of the Provisionee
0x02	Provisioning Start	Indicates the provisioning method selected by the Provisioner based on the capabilities of the Provisionee
0x03	Provisioning Public Key	Contains the Public Key of the Provisionee or the Provisioner
0x04	Provisioning Input Complete	Indicates that the user has completed inputting a value
0x05	Provisioning Confirmation	Contains the provisioning confirmation value of the Provisionee or the Provisioner
0x06	Provisioning Random	Contains the provisioning random value of the Provisionee or the Provisioner
0x07	Provisioning Data	Includes the assigned unicast address of the primary element, a network key, NetKey Index, Flags, and the IV Index
0x08	Provisioning Complete	Indicates that provisioning is complete
0x09	Provisioning Failed	Indicates that provisioning was unsuccessful
0x0A	Provisioning Record Request	Indicates a request to retrieve a provisioning record fragment from the Provisionee
0x0B	Provisioning Record Response	Contains a provisioning record fragment or an error status, sent in response to a Provisioning Record Request
0x0C	Provisioning Records Get	Indicates a request to retrieve the list of IDs of the provisioning records that the Provisionee supports.
0x0D	Provisioning Records List	Contains the list of IDs of the provisioning records that the Provisionee supports.

4.3.4 Mesh Proxy PDU Types

The table below lists the assigned numbers for Proxy PDU types.

Last Modified: 2023-02-02

Filename: assigned_numbers/mesh/mesh_proxy_pdu_types.yaml

Value	Name	Description
0x00	Network PDU	The message is a Network PDU
0x01	Mesh Beacon	The message is a mesh beacon

0x02	Proxy Configuration	The message is a proxy configuration message
0x03	Provisioning PDU	The message is a Provisioning PDU

4.3.5 Mesh Health Fault IDs

This section lists the Health Fault IDs assigned to the health models.

4.3.5.1 Mesh Health Fault IDs by Value

The table below lists the Health Fault IDs organized by fault ID value.

Last Modified: 2023-02-02

Filename: assigned_numbers/mesh/mesh_health_faults.yaml

Value	Name
0x00	No Fault
0x01	Battery Low Warning
0x02	Battery Low Error
0x03	Supply Voltage Too Low Warning
0x04	Supply Voltage Too Low Error
0x05	Supply Voltage Too High Warning
0x06	Supply Voltage Too High Error
0x07	Power Supply Interrupted Warning
0x08	Power Supply Interrupted Error
0x09	No Load Warning
0x0A	No Load Error
0x0B	Overload Warning
0x0C	Overload Error
0x0D	Overheat Warning
0x0E	Overheat Error
0x0F	Condensation Warning
0x10	Condensation Error
0x11	Vibration Warning
0x12	Vibration Error
0x13	Configuration Warning
0x14	Configuration Error
0x15	Element Not Calibrated Warning
0x16	Element Not Calibrated Error

0x17	Memory Warning
0x18	Memory Error
0x19	Self-Test Warning
0x1A	Self-Test Error
0x1B	Input Too Low Warning
0x1C	Input Too Low Error
0x1D	Input Too High Warning
0x1E	Input Too High Error
0x1F	Input No Change Warning
0x20	Input No Change Error
0x21	Actuator Blocked Warning
0x22	Actuator Blocked Error
0x23	Housing Opened Warning
0x24	Housing Opened Error
0x25	Tamper Warning
0x26	Tamper Error
0x27	Device Moved Warning
0x28	Device Moved Error
0x29	Device Dropped Warning
0x2A	Device Dropped Error
0x2B	Overflow Warning
0x2C	Overflow Error
0x2D	Empty Warning
0x2E	Empty Error
0x2F	Internal Bus Warning
0x30	Internal Bus Error
0x31	Mechanism Jammed Warning
0x32	Mechanism Jammed Error
0x80-0xFF	Vendor Specific Warning / Error

4.3.5.2 Mesh Health Fault IDs by Name

The table below lists the Health Fault IDs organized by fault name.

Last Modified: 2023-02-02

Filename: assigned_numbers/mesh/mesh_health_faults.yaml

Name	Value
Actuator Blocked Error	`0x22`
Actuator Blocked Warning	`0x21`
Battery Low Error	`0x02`
Battery Low Warning	`0x01`
Condensation Error	`0x10`
Condensation Warning	`0x0F`
Configuration Error	`0x14`
Configuration Warning	`0x13`
Device Dropped Error	`0x2A`
Device Dropped Warning	`0x29`
Device Moved Error	`0x28`
Device Moved Warning	`0x27`
Element Not Calibrated Error	`0x16`
Element Not Calibrated Warning	`0x15`
Empty Error	`0x2E`
Empty Warning	`0x2D`
Housing Opened Error	`0x24`
Housing Opened Warning	`0x23`
Input No Change Error	`0x20`
Input No Change Warning	`0x1F`
Input Too High Error	`0x1E`
Input Too High Warning	`0x1D`
Input Too Low Error	`0x1C`
Input Too Low Warning	`0x1B`
Internal Bus Error	`0x30`
Internal Bus Warning	`0x2F`
Mechanism Jammed Error	`0x32`
Mechanism Jammed Warning	`0x31`
Memory Error	`0x18`
Memory Warning	`0x17`
No Fault	`0x00`
No Load Error	`0x0A`
No Load Warning	`0x09`
Overflow Error	`0x2C`
Overflow Warning	`0x2B`

Overheat Error	`0x0E`
Overheat Warning	`0x0D`
Overload Error	`0x0C`
Overload Warning	`0x0B`
Power Supply Interrupted Error	`0x08`
Power Supply Interrupted Warning	`0x07`
Self-Test Error	`0x1A`
Self-Test Warning	`0x19`
Supply Voltage Too High Error	`0x06`
Supply Voltage Too High Warning	`0x05`
Supply Voltage Too Low Error	`0x04`
Supply Voltage Too Low Warning	`0x03`
Tamper Error	`0x26`
Tamper Warning	`0x25`
Vendor Specific Warning / Error	`0x80-0xFF`
Vibration Error	`0x12`
Vibration Warning	`0x11`

4.3.6 Mesh Metadata Identifiers

The table below lists the assigned numbers for metadata identifiers.

Last Modified: 2023-09-13

Filename: assigned_numbers/mesh/mesh_metadata_ids.yaml

Value	Identifier
`0x0000`	Health Tests Information
`0x0001`	Sensor Properties
`0x0002`	Light Purpose
`0x0003`	Light Lightness Range
`0x0004`	Light CTL Temperature Range
`0x0005`	Light HSL Hue Range
`0x0006`	Light HSL Saturation Range
`0x0007`	Clock Accuracy
`0x0008`	Timekeeping Reserve

4.4 Mesh Model

The following section includes the assigned numbers used in the Mesh Model specification [16].

4.4.1 Light Purpose

The table below lists the assigned numbers for Light Purpose metadata.

Last Modified: 2023-09-13

Filename: assigned_numbers/mesh/mmdl_light_purposes.yaml

Value	Definition
0x0000	Uplight
0x0001	Uplight Left
0x0002	Uplight Center
0x0003	Uplight Right
0x0004	Downlight
0x0005	Downlight Left
0x0006	Downlight Center
0x0007	Downlight Right
0x0008	Inside
0x0009	Outside
0x000A	Backlight
0x000B	Floodlight
0x000C	Tasklight
0x000D	Tasklight Left
0x000E	Tasklight Center
0x000F	Tasklight Right
0x0010	Warming Light
0x0011	Emergency Light
0x0012	Night Light
0x0013	Indicator Light
0x0014	Undercabinet Light
0x0015	Accent Light
0x0016	Strip Light
0x0017	Troffer Light
0x0018	High Bay Light
0x0019	Wall Pack Light

5   Service Discovery

5.1   Attribute Identifiers

5.1.1   Advanced Audio Distribution Profile (A2DP)

Applicable to Service Class UUIDs:

- AudioSource: `0x110A`
- AudioSink: `0x110B`

See also Section 6.5.

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_ids/a2dp.yaml

Attribute ID	Attribute Name
0x0311	SupportedFeatures

5.1.2   Audio/Video Remote Control Profile (AVRCP)

Applicable to Service Class UUIDs:

- A/V_RemoteControlTarget: `0x110C`
- A/V_RemoteControl: `0x110E`
- A/V_RemoteControlController: `0x110F`

See also Section 6.4.

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_ids/avrcp.yaml

Attribute ID	Attribute Name
0x0311	SupportedFeatures

5.1.3   Basic Imaging Profile (BIP)

Applicable to Service Class UUIDs:

- ImagingResponder: `0x111B`
- ImagingAutomaticArchive: `0x111C`
- ImagingReferencedObjects: `0x111D`

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_ids/bip.yaml

Attribute ID	Attribute Name
0x0200	GoepL2capPsm (BIP v1.1 and later)

0x0310	SupportedCapabilities
0x0311	SupportedFeatures
0x0312	SupportedFunctions
0x0313	TotalImagingDataCapacity

5.1.4 Basic Printing Profile (BPP)

Applicable to Service Class UUIDs:

- Direct Printing: 0x1118
- ReferencePrinting: 0x1119
- DirectPrintingReferenceObjectsService: 0x1120
- ReflectedUI: 0x1121
- PrintingStatus: 0x1123

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_ids/bpp.yaml

Attribute ID	Attribute Name
0x0350	Document Formats Supported
0x0352	Character Repertoires Supported
0x0354	XHTML-Print Image Formats Supported
0x0356	Color Supported
0x0358	1284ID
0x035A	Printer Name
0x035C	Printer Location
0x035E	Duplex Supported
0x0360	Media Types Supported
0x0362	MaxMediaWidth
0x0364	MaxMediaLength
0x0366	Enhanced Layout Supported
0x0368	RUI Formats Supported
0x0370	Reference Printing RUI Supported
0x0372	Direct Printing RUI Supported
0x0374	Reference Printing Top URL
0x0376	Direct Printing Top URL
0x0378	Printer Admin RUI Top URL
0x037A	Device Name

5.1.5 Bluetooth Core Specification: Universal Attributes

The following attribute IDs have the same meaning for all services.

See Bluetooth Core Specification [Vol 3] Part B, Section 5.1 [4].

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_ids/universal_attributes.yaml

Attribute ID	Attribute Name
0x0000	ServiceRecordHandle
0x0001	ServiceClassIDList
0x0002	ServiceRecordState
0x0003	ServiceID
0x0004	ProtocolDescriptorList
0x0005	BrowseGroupList
0x0006	LanguageBaseAttributeIDList
0x0007	ServiceInfoTimeToLive
0x0008	ServiceAvailability
0x0009	BluetoothProfileDescriptorList
0x000A	DocumentationURL
0x000B	ClientExecutableURL
0x000C	IconURL
0x000D	AdditionalProtocolDescriptorLists

5.1.6 Bluetooth Core Specification: Service Discovery Service

Applicable to Service Class UUIDs:

- ServiceDiscoveryServerServiceClassID: 0x1000

See Bluetooth Core Specification [Vol 3] Part B, Section 5.2 [4].

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_ids/sdp.yaml

Attribute ID	Attribute Name
0x0200	VersionNumberList
0x0201	ServiceDatabaseState

5.1.7   Bluetooth Core Specification: Browse Group Descriptor Service

Applicable to Service Class UUIDs:

- BrowseGroupDescriptorServiceClassID: `0x1001`

See Bluetooth Core Specification [Vol 3] Part B, Section 5.3 [4].

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_ids/browse_group_descriptor_service.yaml

Attribute ID	Attribute Name
`0x0200`	GroupID

5.1.8   Calendar Tasks and Notes (CTN)

Applicable to Service Class UUIDs:

- CTN Access Service: `0x113C`
- CTN Notification Service: `0x113D`

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_ids/calendar_tasks_and_notes.yaml

Attribute ID	Attribute Name
`0x0315`	CASInstanceID
`0x0317`	CTNSupportedFeatures

5.1.9   Cordless Telephony Profile (CTP)

Applicable to Service Class UUIDs:

- CordlessTelephony: `0x1109`

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_ids/cordless_telephony_profile.yaml

Attribute ID	Attribute Name
`0x0301`	External Network

5.1.10   Device Identification Profile (DID)

Applicable to Service Class UUIDs:

- PnPInformation: `0x1200`

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_ids/device_identification_profile.yaml

Attribute ID	Attribute Name
0x0200	SpecificationID
0x0201	VendorID
0x0202	ProductID
0x0203	Version
0x0204	PrimaryRecord
0x0205	VendorIDSource

5.1.11 FAX Profile (FAX)

Applicable to Service Class UUIDs:

- Fax: 0x1111

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_ids/fax_profile.yaml

Attribute ID	Attribute Name
0x0302	Fax Class 1 Support
0x0303	Fax Class 2.0 Support
0x0304	Fax Class 2 Support(vendor-specific class)
0x0305	Audio Feedback Support

5.1.12 File Transfer Profile (FTP)

Applicable to Service Class UUIDs:

- OBEXFileTransfer: 0x1106

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_ids/file_transfer_profile.yaml

Attribute ID	Attribute Name
0x0200	GoepL2capPsm (FTP v1.2 and later)

5.1.13 Global Navigation Satellite System Profile (GNSS)

Applicable to Service Class UUIDs:

- GNSS_Server: 0x1136

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_ids/gnss.yaml

Attribute ID	Attribute Name
0x0200	SupportedFeatures

5.1.14   Hands-Free Profile (HFP)

Applicable to Service Class UUIDs:

- Handsfree: `0x111E`
- HandsfreeAudioGateway: `0x111F`

See also Section 6.10.

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_ids/hands_free_profile.yaml

Attribute ID	Attribute Name
0x0301	Network
0x0311	SupportedFeatures

5.1.15   Hardcopy Replacement Profile (HCRP)

Applicable to Service Class UUIDs:

- HCR_Print: `0x1126`
- HCR_Scan: `0x1127`

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_ids/hardcopy_replacement_profile.yaml

Attribute ID	Attribute Name
0x0300	1284ID
0x0302	Device Name
0x0304	Friendly Name
0x0306	Device Location

5.1.16   Headset Profile (HSP)

Applicable to Service Class UUIDs:

- Headset: `0x1108`
- Headset – Audio Gateway (AG): `0x1112`
- Headset – HS: `0x1131`

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_ids/headset_profile.yaml

Attribute ID	Attribute Name
0x0302	Remote Audio Volume Control

5.1.17 Health Device Profile (HDP)

Applicable to Service Class UUIDs:

- HDP Source: 0x1401
- HDP Sink: 0x1402

See also Section 6.8.

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_ids/health_device_profile.yaml

Attribute ID	Attribute Name
0x0200	SupportFeaturesList
0x0301	DataExchangeSpecification
0x0302	MCAP Supported Procedures

5.1.18 Human Interface Device Profile (HID)

Applicable to Service Class UUIDs:

- HumanInterfaceDeviceService: 0x1124

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_ids/human_interface_device_profile.yaml

Attribute ID	Attribute Name
0x0200	HIDDeviceReleaseNumber (Deprecated)
0x0201	HIDParserVersion
0x0202	HIDDeviceSubclass
0x0203	HIDCountryCode
0x0204	HIDVirtualCable
0x0205	HIDReconnectInitiate
0x0206	HIDDescriptorList
0x0207	HIDLANGIDBaseList
0x0208	HIDSDPDisable (Deprecated)
0x0209	HIDBatteryPower
0x020A	HIDRemoteWake

0x020B	HIDProfileVersion
0x020C	HIDSupervisionTimeout
0x020D	HIDNormallyConnectable
0x020E	HIDBootDevice
0x020F	HIDSSRHostMaxLatency
0x0210	HIDSSRHostMinTimeout

5.1.19 Interoperability Requirements for Bluetooth technology as a WAP Bearer (WAP)

Applicable to Service Class UUIDs:

- WAP: 0x1113
- WAP_CLIENT: 0x1114

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_ids/interoperability_requirements.yaml

Attribute ID	Attribute Name
0x0306	NetworkAddress
0x0307	WAPGateway
0x0308	HomePageURL
0x0309	WAPStackType

5.1.20 Message Access Profile (MAP)

Applicable to Service Class UUIDs:

- Message Access Server: 0x1132
- Message Notification Server: 0x1133

See also Section 6.9.

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_ids/message_access_profile.yaml

Attribute ID	Attribute Name
0x0200	GoepL2capPsm (MAP v1.2 and later)
0x0315	MASInstanceID
0x0316	SupportedMessageTypes
0x0317	MapSupportedFeatures (MAP v1.2 and later)

5.1.21   Multi-Profile Specification (MPS)

Applicable to Service Class UUIDs:

- MPS SC UUID: `0x113B`

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_ids/multi_profile.yaml

Attribute ID	Attribute Name
`0x0200`	MPSD Scenarios
`0x0201`	MPMD Scenarios
`0x0202`	Supported Profiles & Protocols

5.1.22   Object Push Profile (OPP)

Applicable to Service Class UUIDs:

- OBEXObjectPush: `0x1105`

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_ids/object_push_profile.yaml

Attribute ID	Attribute Name
`0x0200`	GoepL2capPsm (OPP v1.2 and later)
`0x0300`	Service Version
`0x0303`	Supported Formats List

5.1.23   Personal Area Network Profile (PAN)

Applicable to Service Class UUIDs:

- PANU: `0x1115`
- NAP: `0x1116`
- GN: `0x1117`

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_ids/pan_profile.yaml

Attribute ID	Attribute Name
`0x0200`	IpSubnet (Not used in PAN v1.0)
`0x030A`	SecurityDescription
`0x030B`	NetAccessType
`0x030C`	MaxNetAccessrate
`0x030D`	IPv4Subnet

0x030E	IPv6Subnet

5.1.24 Phone Book Access Profile (PBAP)

Applicable to Service Class UUIDs:

• Phonebook Access – PCE: 0x112E
• Phonebook Access – PSE: 0x112F

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_ids/phone_book_access_profile.yaml

Attribute ID	Attribute Name
0x0200	GoepL2capPsm (PBAP v1.2 and later)
0x0314	SupportedRepositories
0x0317	PbapSupportedFeatures (PBAP v1.2 and later)

5.1.25 Synchronization Profile (SYNC)

Applicable to Service Class UUIDs:

• IrMCSync: 0x1104

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_ids/synchronization_profile.yaml

Attribute ID	Attribute Name
0x0301	Supported Data Stores List

5.2 Attribute ID Offsets for Strings

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/attribute_id_offsets_for_strings.yaml

Attribute ID Offset	Attribute ID Offset Name
0x0000	ServiceName
0x0001	ServiceDescription
0x0002	ProviderName

5.3 Protocol Parameters

Last Modified: 2023-02-02

Filename: assigned_numbers/service_discovery/protocol_parameters.yaml

Protocol	Parameter Name	Parameter Index
L2CAP	PSM	1
RFCOMM	Channel	1
TCP	Port	1
UDP	Port	1
BNEP	Version	1
BNEP	Supported Network Packet Type List	2

6   Profiles and Services

6.1   Environmental Sensing Service

6.1.1   Permitted Characteristics

The list below specifies the characteristics that are permitted for use with the Environmental Sensing Service [7].

- Ammonia Concentration
- Apparent Wind Direction
- Apparent Wind Speed
- Barometric Pressure Trend
- Carbon Monoxide Concentration
- Dew Point
- Elevation
- Gust Factor
- Heat Index
- Humidity
- Irradiance
- Magnetic Declination
- Magnetic Flux Density - 2D
- Magnetic Flux Density - 3D
- Methane Concentration
- Nitrogen Dioxide Concentration
- Non-Methane Volatile Organic Compounds Concentration
- Ozone Concentration
- Particulate Matter - PM1 Concentration
- Particulate Matter - PM10 Concentration
- Particulate Matter - PM2.5 Concentration
- Pollen Concentration
- Pressure
- Rainfall
- Sulfur Dioxide Concentration
- Sulfur Hexafluoride Concentration
- Temperature
- True Wind Direction
- True Wind Speed
- UV Index
- Wind Chill

6.2   User Data Service

6.2.1   Permitted Characteristics

The list below specifies the characteristics that are permitted for use with the User Data Service [25].

- Activity Goal
- Aerobic Heart Rate Lower Limit
- Aerobic Heart Rate Upper Limit
- Aerobic Threshold
- Age
- Anaerobic Heart Rate Lower Limit

- Anaerobic Heart Rate Upper Limit
- Anaerobic Threshold
- Caloric Intake
- Date of Birth
- Date of Threshold Assessment
- Device Wearing Position
- Email Address
- Fat Burn Heart Rate Lower Limit
- Fat Burn Heart Rate Upper Limit
- First Name
- Five Zone Heart Rate Limits
- Four Zone Heart Rate Limits
- Gender
- Handedness
- Heart Rate Max
- Height
- High Intensity Exercise Threshold
- High Resolution Height
- Hip Circumference
- Language
- Last Name
- Maximum Recommended Heart Rate
- Middle Name
- Preferred Units
- Resting Heart Rate
- Sedentary Interval Notification
- Sport Type for Aerobic and Anaerobic Thresholds
- Stride Length
- Three Zone Heart Rate Limits
- Two Zone Heart Rate Limits
- VO2 Max
- Waist Circumference
- Weight

6.3   A/V Distribution Protocol (AVDTP)

6.3.1   Media Type

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/avdtp/avdtp_media_type.yaml

Value	Description
0x0	Audio
0x1	Video
0x2	Multimedia

6.3.2   A/V Content Protection Method

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/avdtp/avdtp_content_protection_method.yaml

Value	Mnemonic	Content Security (reference)	Usage in Bluetooth (reference)
0x0001	DTCP	Please see www.dtcp.com for details of how Digital Transmission Content Protection (DTCP) is mapped to the Bluetooth AV transport services and for information about DTCP licensing by the Digital Transmission Licensing Administrator (DTLA).	Bluetooth A/V Distribution Transport Protocol Specification "Content Protection Capabilities", Section 8.19.6
0x0002	SCMS-T	SCMS-T uses Cp-bit and L-bit that are defined by IEC60958-3:1999 and IEC61119-6:1992. For definition of L-bit, normal logic, instead of reverse situation defined in section 4.3.1 of IEC60958-3, shall be applied.	The Contents Protection Header (CP Header) defined by A2DP is used for transmitting these two bits (Cp-bit and L-bit). CP Header has a one-byte length. The bit0 field of CP Headers is used for the L-bit and the bit 1 field of CP Header is used for the Cp-bit. Other bits (from bit2 to bit7) are defined as the RFA field.

General Note: The following requirements must be fulfilled before assigning an identifier:

- The Content Protection method should come with a valid reference to either the relevant controlling entity or a description of the method.

- The Content Protection method should indicate how the identifier is to be used in the context of Bluetooth A/V.

6.4   A/V Remote Control Profile (AVRCP)

See also Section 5.1.2.

6.4.1   Major Player Type

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/avrcp/avrcp_major_player_type.yaml

Value	Parameter Description
0x01	Audio
0x02	Video
0x04	Broadcasting Audio
0x08	Broadcasting Video

6.4.2   Player Sub Type

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/avrcp/avrcp_player_sub_type.yaml

Value	Parameter Description
0x00000001	Audio Book
0x00000002	Podcast

6.4.3   Folder Type

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/avrcp/avrcp_folder_type.yaml

Value	Parameter Description
0x00	Mixed
0x01	Titles
0x02	Albums
0x03	Artists
0x04	Genres
0x05	Playlists
0x06	Years

6.4.4 Media Type

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/avrcp/avrcp_media_type.yaml

Value	Parameter Description
0x00	Audio
0x01	Video

6.4.5 List of Media Attributes

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/avrcp/avrcp_media_attributes.yaml

Value	Description	Allowed Values
0x0	Illegal, Should Not Be Used	
0x1	Title of the Media	Any text encoded in specific character set
0x2	Name of the Artist	Any text encoded in specified character set
0x3	Name of the Album	Any text encoded in specified character set
0x4	Number of the Media (e.g., Track Number in a CD)	Numeric ASCII text with zero suppresses
0x5	Total Number of the Media (e.g., Total Number of Tracks in a CD)	Numeric ASCII text with zero suppresses
0x6	Genre	Any text encoded in specified character set
0x7	Playing Time, in Milliseconds	Numeric ASCII text with zero suppresses (ex. 2min30sec = 150000)

6.4.6 Player Application Settings

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/avrcp/avrcp_player_application_settings.yaml

Player Application Setting Attribute	Attribute Description	Player Application Setting ValueID	Description
0x00	Illegal - Should Not Be Used	None	
0x01	Equalizer ON/OFF Status	0x01	OFF

		0x02	ON
0x02	Repeat Mode Status	0x01	OFF
		0x02	Single Track Repeat
		0x03	All Track Repeat
		0x04	Group Repeat
0x03	Shuffle ON/OFF Status	0x01	OFF
		0x02	All Tracks Shuffle
		0x03	Group Shuffle
0x04	Scan ON/OFF Status	0x01	OFF
		0x02	All Tracks Scan
		0x03	Group Scan
0x80-0xFF	Provided for TG Driven Static Media Player Menu Extension by CT		

6.5 Advanced Audio Distribution Profile (A2DP)

See also Section 5.1.1.

6.5.1 Audio Codec ID

Last Modified: 2023-09-05

Filename: assigned_numbers/profiles_and_services/a2dp/a2dp.yaml

Value	Codec	Specified In	Used in
0x00	SBC	A2DP	A2DP
0x01	MPEG-1, 2 Audio	A2DP	A2DP
0x02	MPEG-2, 4 AAC	A2DP	A2DP
0x03	MPEG-D USAC	A2DP	A2DP
0x04	ATRAC Family	A2DP	A2DP
0xFF	Vendor Specific (formerly Non-A2DP)	A2DP	A2DP

6.6 Video Distribution Profile (VDP)

6.6.1 Video Codec ID

Last Modified: 2023-09-05

Filename: assigned_numbers/profiles_and_services/vdp/vdp.yaml

Value	Codec	Specified In	Used in
0x00	H.263 Baseline	VDP	VDP
0x01	MPEG-4 Visual	VDP	VDP
0x02	H.263 Profile 3	VDP	VDP
0x04	H.263 Profile 8	VDP	VDP
0xFF	Vendor Specific (formerly Non-VDP)	N/A	VDP

6.7   Transport Discovery Service

6.7.1   Organization IDs

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/tds/transport_discovery_service_id.yaml

Value	Definition
0x01	Bluetooth SIG
0x02	Wi-Fi Alliance Neighbor Awareness Networking
0x03	Wi-Fi Alliance Service Advertisement

6.8   Health Device Profile

See also Section 5.1.17.

6.8.1   Data Exchange Specifications

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/hdp/data_exchange_specs.yaml

Value	Document Name	Document Number
0x01	Health informatics - Personal health device communication - Application profile - Optimized exchange protocol	ISO/IEEE 11073-20601

6.8.2   Device Data Specializations

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/hdp/device_data_specs.yaml

MDEP Data Type (IEEE 11073-10101 Nomenclature Data Type Code)	Data Type	IEEE 11073 Document Number	IEEE 11073 Document Name	Notes
0x1000	Hydra	11073-20601	IEEE 11073 Part 10101: Nomenclature; IEEE 11073-20601: Application profile - Optimized Exchange Protocol	
0x1004	Pulse Oximeter	11073-10404	Health informatics - Personal health device communication - Device specialization - Pulse oximeter	
0x1006	Basic ECG (heart rate)	11073-10406	Health informatics - Personal health device communication - Device specialization - Basic ECG (heart rate)	
0x1007	Blood Pressure Monitor	11073-10407	Health informatics - Personal health device communication - Device specialization - Blood pressure monitor	
0x1008	Body Thermometer	11073-10408	Health informatics - Personal health device communication - Device specialization - Body thermometer	

0x100F	Body Weight Scale	11073-10415	Health informatics - Personal health device communication - Device specialization - Body weight scale	
0x1011	Glucose Meter	11073-10417	Health informatics - Personal health device communication - Device Specialization - Glucose meter	
0x1012	International Normalized Ratio (INR) Monitor	11073-10418	Health informatics - Personal health device communication - Device Specialization - International Normalized Ratio (INR) Monitor	
0x1014	Body Composition Analyzer	11073-10420	Health informatics - Personal health device communication - Device specialization - Body composition analyzer	
0x1015	Peak Flow Monitor	11073-10421	Health informatics - Personal health device communication - Device specialization - Peak flow monitor	
0x101C	Power Status Monitor	11073-10427	Health infomatics - Personal health device communication - Part 10427: Device specialization - Power Status Monitor of Personal Health Devices	
0x1029	Cardiovascular Fitness and Activity Monitor	11073-10441	Health infomatics - Personal health device communication - Device specialization - Cardiovascular Fitness and Activity Monitor	Note 1
0x102A	Strength Fitness Equipment	11073-10442	Health infomatics - Personal health device communication - Device specialization - Strength fitness equipment	Note 1
0x1047	Independent Living Activity Hub	11073-10471	Health infomatics - Personal health device communication - Device specialization - Independent Living Activity Hub	Note 1
0x1048	Medication monitor	11073-10472	Health informatics - Personal health device communication - Device specialization - Medication monitor	
0x1049	Generic	11073-20601	IEEE 11073 Part 10101: Nomenclature; IEEE 11073-20601: Application profile - Optimized Exchange Protocol	
0x1068	Step Counter based on 10441	11073-10441	Health informatics - Personal health device communication - Device specialization - Step Counter based on 10441	Note 2
0x1075	Fall Sensor	11073-10471	Health informatics - Personal health device communication - Device specialization - Fall Sensor	Note 3

0x1076	Personal Emergency Response Sensor	11073-10471	Health informatics - Personal health device communication - Device specialization - Personal Emergency Response Sensor	Note 3
0x1077	Smoke Sensor	11073-10471	Health informatics - Personal health device communication - Device specialization - Smoke Sensor	Note 3
0x1078	Carbon Monoxide (CO) Sensor	11073-10471	Health informatics - Personal health device communication - Device specialization - Carbon Monoxide (CO) Sensor	Note 3
0x1079	Water Sensor	11073-10471	Health informatics - Personal health device communication - Device specialization - WaterSensor	Note 3
0x107A	Gas Sensor	11073-10471	Health informatics - Personal health device communication - Device specialization - Gas Sensor	Note 3
0x107B	Motion Sensor	11073-10471	Health informatics - Personal health device communication - Device specialization - Motion Sensor	Note 3
0x107C	Property Exit Sensor	11073-10471	Health informatics - Personal health device communication - Device specialization - Property Exit Sensor	Note 3
0x107D	Enuresis Sensor	11073-10471	Health informatics - Personal health device communication - Device specialization - Enuresis Sensor	Note 3
0x107E	Contact Closure Sensor	11073-10471	Health informatics - Personal health device communication - Device specialization - Contact Closure Sensor	Note 3
0x107F	Usage Sensor	11073-10471	Health informatics - Personal health device communication - Device specialization - Usage Sensor	Note 3
0x1080	Switch Sensor	11073-10471	Health informatics - Personal health device communication - Device specialization - Switch Sensor	Note 3
0x1081	Medication Dosing Sensor	11073-10471	Health informatics - Personal health device communication - Device specialization - Medication Dosing Sensor	Note 3
0x1082	Temperature Sensor	11073-10471	Health informatics - Personal health device communication - Device specialization - Temperature Sensor	Note 3

Note 1: Only for devices that support all objects.
Note 2: Profiling on top of IEEE 11073-10415 is part of Continua Health Allicance Interoperability Guideline v1.5 or later.

Note 3: Profiling on top of IEEE 11073-10471 is part of Continua Health Allicance Interoperability Guideline v1.5 or later.

6.9   Message Access Profile

See also Section 5.1.20.

6.9.1   Presence

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/map/presence.yaml

Value	Parameter Name
0x00	Unknown
0x01	Offline
0x02	Online
0x03	Away
0x04	Do Not Disturb
0x05	Busy
0x06	In a Meeting

6.9.2   Chat State

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/map/chat_state.yaml

Value	Parameter Name
0x00	Unknown
0x01	Inactive
0x02	Active
0x03	Composing
0x04	Paused Composing
0x05	Gone

6.9.3   Message Extended Data

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/map/message_extended_data.yaml

Value	Parameter Name	Format
0x00	Number of Facebook Likes	Integer
0x01	Number of Twitter Followers	Integer
0x02	Number of Twitter Retweets	Integer

0x03	Number of Google +1s	Integer

6.10   Hands-Free Profile

See also Section 5.1.14.

6.10.1   HF Indicators

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/hfp/hands_free_profile.yaml

Value	Description
0x01	0: Enhanced Safety is Disabled
	1: Enhanced Safety is Enabled
0x02	0 - 100: Remaining level of Battery

6.10.2   Bearer Technology

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/hfp/bearer_technology.yaml

Value	Technology
0x01	3G
0x02	4G
0x03	LTE
0x04	Wi-Fi
0x05	5G
0x06	GSM
0x07	CDMA
0x08	2G
0x09	WCDMA

6.10.3   Uniform Caller Identifiers

See Section 6.11.1.

6.11   Telephone Bearer Service

6.11.1   Uniform Caller Identifiers

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/tbs/uniform_caller_identifiers.yaml

Client ID	Client Name	Company Name	Notes
E.164	Any built-in dialer able to make standard phone calls	N/A	For example, mobile service provider or landline
bbm	Blackberry Messenger	Blackberry	
bbv	Blackberry Voice	Blackberry	
chsec	ChatSecure		https://chatsecure.org/about/
con	ChatOn	Samsung	
eyebm	Eyebeam	Counterpath	
fbch	Facebook Chat	Meta	
ftime	Facetime	Apple	
gtalk	Google Talk	Google LLC	
hgus	Hangouts	Google LLC	
icht	iChat	Apple	
imo	imo.im	PageBites, Inc.	https://imo.im/register
jabr	Jabber	Cisco	
kik	KIK	KIK Interactive	
kkt	KakaoTalk	Daum Communications	
lbn	Libon	Orange Vallée	
lne	Line	Line Corporation	https://line.me/en/
lync	Lync	Microsoft	
mme	MessageMe	Yahoo	
mngr	Messanger	Meta	
nbuz	Nimbuzz	Nimbuzz BV / Nimbuzz Internet India Pvt. Ltd	
ov	ooVo	ooVoo LLC	
qik	Skye Qik	Microsoft	
qq	QQ	Tencent Technology	
rnds	Rounds	Rounds Entertainment Ltd.	
skype	Skype	Microsoft	
spika	Spika	Studio Djetelina d.o.o.	

tgo	Tango	TangoMe Inc.	
tgrm	Telegram	Telegram Messenger LLP	
un000 - un999	Unknown	Unknown	If the client is unknown, the host OS should assign a string from the range un000 to un999 inclusive. This string should be assigned to this client for the time it was installed to when it is uninstalled, after which the string can be reused.
vbr	Viber	Rakuten	
vonm	Vonage Mobile	Vonage	
wbrtc	Any WebRTC Enabled Browser	N/A	Firefox and Chrome Browsers
wcht	WeChat	Tencent	
wtsap	WhatsApp	Meta	

6.12   Generic Audio

6.12.1   Audio Location Definitions

Last Modified: 2023-11-29

Filename: assigned_numbers/profiles_and_services/generic_audio/audio_location_definitions.yaml

Value	Audio Location
0x00000000	Mono Audio (no specified Audio Location)
0x00000001	Front Left
0x00000002	Front Right
0x00000004	Front Center
0x00000008	Low Frequency Effects 1
0x00000010	Back Left
0x00000020	Back Right
0x00000040	Front Left of Center
0x00000080	Front Right of Center
0x00000100	Back Center
0x00000200	Low Frequency Effects 2
0x00000400	Side Left
0x00000800	Side Right
0x00001000	Top Front Left
0x00002000	Top Front Right
0x00004000	Top Front Center
0x00008000	Top Center
0x00010000	Top Back Left
0x00020000	Top Back Right
0x00040000	Top Side Left
0x00080000	Top Side Right
0x00100000	Top Back Center
0x00200000	Bottom Front Center
0x00400000	Bottom Front Left
0x00800000	Bottom Front Right
0x01000000	Front Left Wide
0x02000000	Front Right Wide
0x04000000	Left Surround
0x08000000	Right Surround

6.12.2 Audio Input Type Definitions

Last Modified: 2023-11-01

Filename: assigned_numbers/profiles_and_services/generic_audio/audio_input_type_definitions.yaml

Value	Label	Description
0x00	Unspecified	Unspecified Input
0x01	Bluetooth	Bluetooth Audio Stream
0x02	Microphone	Microphone
0x03	Analog	Analog Interface
0x04	Digital	Digital Interface
0x05	Radio	AM/FM/XM/etc.
0x06	Streaming	Streaming Audio Source
0x07	Ambient	Transparency/Pass-through

6.12.3 Context Type

Last Modified: 2023-12-08

Filename: assigned_numbers/profiles_and_services/generic_audio/context_type.yaml

Value	Label	Description
0x0000	Prohibited	Prohibited
0x0001	Unspecified	Identifies audio where the use case context does not match any other defined value, or where the context is unknown or cannot be determined.
0x0002	Conversational	Conversation between humans, for example, in telephony or video calls, including traditional cellular as well as VoIP and Push-to-Talk
0x0004	Media	Media, for example, music playback, radio, podcast or movie soundtrack, or tv audio
0x0008	Game	Audio associated with video gaming, for example gaming media; gaming effects; music and in-game voice chat between participants; or a mix of all the above
0x0010	Instructional	Instructional audio, for example, in navigation, announcements, or user guidance
0x0020	Voice Assistants	Man-machine communication, for example, with voice recognition or virtual assistants
0x0040	Live	Live audio, for example, from a microphone where audio is perceived both through a direct acoustic path and through an LE Audio Stream
0x0080	Sound Effects	Sound effects including keyboard and touch feedback; menu and user interface sounds; and other system sounds

0x0100	Notifications	Notification and reminder sounds; attention-seeking audio, for example, in beeps signaling the arrival of a message
0x0200	Ringtone	Alerts the user to an incoming call, for example, an incoming telephony or video call, including traditional cellular as well as VoIP and Push-to-Talk
0x0400	Alerts	Alarms and timers; immediate alerts, for example, in a critical battery alarm, timer expiry or alarm clock, toaster, cooker, kettle, microwave, etc.
0x0800	Emergency Alarm	Emergency alarm Emergency sounds, for example, fire alarms or other urgent alerts

6.12.4   Codec_Specific_Capabilities LTV Structures

6.12.4.1   Supported_Sampling_Frequencies

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/generic_audio/codec_capabilities/supported_sampling_frequencies.yaml

Parameter	Size (Octets)	Value	Description
Length	1	0x03	
Type	1	0x01	
Value	2	Bit 0: 8000 Hz	Bitfield
		Bit 1: 11025 Hz	0b1 = supported
		Bit 2: 16000 Hz	0b0 = not supported
		Bit 3: 22050 Hz	
		Bit 4: 24000 Hz	
		Bit 5: 32000 Hz	
		Bit 6: 44100 Hz	
		Bit 7: 48000 Hz	
		Bit 8: 88200 Hz	
		Bit 9: 96000 Hz	
		Bit 10: 176400 Hz	
		Bit 11: 192000 Hz	
		Bit 12: 384000 Hz	

6.12.4.2   Supported_Frame_Durations

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/generic_audio/codec_capabilities/supported_frame_-durations.yaml

Parameter	Size (Octets)	Value	Description
Length	1	0x02	
Type	1	0x02	
Value	1	Bit 0: 7.5 ms frame duration	0b1 = supported, 0b0 = not supported
		Bit 1: 10 ms frame duration	0b1 = supported, 0b0 = not supported
		Bit 4: 7.5 ms preferred	Valid only when 7.5 ms is supported and 10 ms is supported. Shall not be set to 0b1 if bit 5 is set to 0b1.
		Bit 5: 10 ms preferred	Valid only when 7.5 ms is supported and 10 ms is supported. Shall not be set to 0b1 if bit 4 is set to 0b1.

6.12.4.3   Supported_Audio_Channel_Counts

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/generic_audio/codec_capabilities/supported_audio_-channel_counts.yaml

Parameter	Size (Octets)	Value	Description
Length	1	0x02	
Type	1	0x03	
value	1	Bit 0: Channel count: 1	Bitfield
		Bit 1: Channel count: 2	0b0 = Channel count not supported
		Bit 2: Channel count: 3	0b1 = Channel count supported
		Bit 3: Channel count: 4	
		Bit 4: Channel count: 5	
		Bit 5: Channel count: 6	
		Bit 6: Channel count: 7	
		Bit 7: Channel count: 8	

6.12.4.4   Supported_Octets_Per_Codec_Frame

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/generic_audio/codec_capabilities/supported_octets_-per_codec_frame.yaml

Parameter	Size (Octets)	Value
Length	1	0x05
Type	1	0x04

Value	4	Octet 0-1: Minimum number of octets supported per codec frame
		Octet 2-3: Maximum number of octets supported per codec frame

6.12.4.5   Supported_Max_Codec_Frames_Per_SDU

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/generic_audio/codec_capabilities/supported_max_-codec_frames_per_sdu.yaml

Parameter	Size (Octets)	Value	Description
Length	1	0x02	
Type	1	0x05	
Value	1		Maximum number of codec frames per SDU supported by this device

6.12.5   Codec_Specific_Configuration LTV structures

6.12.5.1   Sampling_Frequency

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/generic_audio/codec_configuration_ltv/sampling_-frequency_configuration.yaml

Parameter	Size (Octets)	Value	Description
Length	1	0x02	
Type	1	0x01	
Value	1	0x01: 8000 Hz	Selected codec sampling frequency
		0x02: 11025 Hz	
		0x03: 16000 Hz	
		0x04: 22050 Hz	
		0x05: 24000 Hz	
		0x06: 32000 Hz	
		0x07: 44100 Hz	
		0x08: 48000 Hz	
		0x09: 88200 Hz	
		0x0A: 96000 Hz	
		0x0B: 176400 Hz	
		0x0C: 192000 Hz	

		0x0D: 384000 Hz	

6.12.5.2   Frame_Duration

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/generic_audio/codec_configuration_ltv/frame_duration_configuration.yaml

Parameter	Size (Octets)	Value	Description
Length	1	0x02	
Type	1	0x02	
Value	1	0x00: Use 7.5 ms codec frames	Selected codec frame duration
		0x01: Use 10 ms codec frames	

6.12.5.3   Audio_Channel_Allocation

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/generic_audio/codec_configuration_ltv/audio_channel_allocation_configuration.yaml

Parameter	Size (Octets)	Value	Description
Length	1	0x05	
Type	1	0x03	
Value	4		4-octet bitfield of Audio Location values

6.12.5.4   Octets_Per_Codec_Frame

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/generic_audio/codec_configuration_ltv/octets_per_codec_frame_configuration.yaml

Parameter	Size (Octets)	Value	Description
Length	1	0x03	
Type	1	0x04	
Value	2		Number of octets used per codec frame

6.12.5.5   Codec_Frame_Blocks_Per_SDU

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/generic_audio/codec_configuration_ltv/codec_-frame_blocks_per_sdu_configuration.yaml

Parameter	Size (Octets)	Value	Description
Length	1	`0x02`	
Type	1	`0x05`	
Value	1		Number of blocks of codec frames per SDU

6.12.6   Metadata LTV structures

6.12.6.1   Preferred_Audio_Contexts

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/generic_audio/metadata_ltv/preferred_audio_con-texts.yaml

Parameter	Size (Octets)	Value	Description
Length	1	`0x03`	
Type	1	`0x01`	
Value	2		Bitfield of Context Type values. See Context Type values defined in Section 6.12.3. 0b0 = Context Type is not a preferred use case for this codec configuration. 0b1 = Context Type is a preferred use case for this codec configuration.

6.12.6.2   Streaming_Audio_Contexts

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/generic_audio/metadata_ltv/streaming_audio_con-texts.yaml

Parameter	Size (Octets)	Value	Description
Length	1	`0x03`	
Type	1	`0x02`	

Value	2		Bitfield of Context Type values See Context Type values defined in Section 6.12.3. 0b0 = Context Type is not an intended use case for this Audio Stream. 0b1 = Context Type is an intended use case for this Audio Stream.

6.12.6.3 Program_Info

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/generic_audio/metadata_ltv/program_info.yaml

Parameter	Size (Octets)	Value	Description
Length	1	Varies	
Type	1	0x03	
Value	Varies		Title and/or summary of Audio Stream content: UTF-8 format

6.12.6.4 Language

Last Modified: 2023-02-02

Filenames: gss/org.bluetooth.characteristic.language.yaml, assigned_numbers/profiles_and_services/generic_audio/metadata_ltv/language.yaml

Parameter	Size (Octets)	Value	Description
Length	1	0x04	
Type	1	0x04	
Value	3		3-byte, lower case language code as defined in ISO 639-3

6.12.6.5 CCID_List

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/generic_audio/metadata_ltv/ccid_list.yaml

Parameter	Size (Octets)	Value	Description
Length	1	Varies	
Type	1	0x05	
Value	Varies		Array of CCID values

6.12.6.6   Parental_Rating

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/generic_audio/metadata_ltv/parental_rating.yaml

Parameter	Size (Octets)	Value	Description
Length	1	`0x02`	
Type	1	`0x06`	
Value	1	`0x00`: no rating	Bits 0-3 Value representing the parental rating.
		`0x01`: recommended for listeners of any age	
		Other values: recommended for listeners of age Y years, where Y = value + 3 years. e.g., 0x05 = recommended for listeners of 8 years or older.	The numbering scheme aligns with Annex F of EN 300 707 v1.2.1 which defines parental rating for viewing. https://www.etsi.org ETSI EN 300 707 V1.2.1 (2002-12)

6.12.6.7   Program_Info_URI

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/generic_audio/metadata_ltv/programinfo_uri.yaml

Parameter	Size (Octets)	Value	Description
Length	1	Varies	
Type	1	`0x07`	
Value	Varies		A UTF-8 formatted URL link used to present more information about Program_Info

6.12.6.8   Extended_Metadata

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/generic_audio/metadata_ltv/extended_meta-data.yaml

Parameter	Size (Octets)	Value
Length	1	Varies
Type	1	`0xFE`
Value	Varies	Octet 0–1: Extended Metadata Type
		Octet 2–254: Extended Metadata

6.12.6.9   Vendor_Specific

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/generic_audio/metadata_ltv/vendor_specific.yaml

Parameter	Size (Octets)	Value	Description
Length	1	Varies	
Type	1	0xFF	
Value	Varies	Octet 0–1: Company_ID	Company ID values are defined in Bluetooth Assigned Numbers
		Octet 2–254: Vendor-Specific Metadata	

6.12.6.10   Audio_Active_State

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/generic_audio/metadata_ltv/audio_active_state.yaml

Parameter	Size (Octets)	Value
Length	1	0x02
Type	1	0x08
Value	1	0x00: No audio data is being transmitted
		0x01: Audio data is being transmitted

6.12.6.11   Broadcast_Audio_Immediate_Rendering_Flag

Last Modified: 2023-02-02

Filename: assigned_numbers/profiles_and_services/generic_audio/metadata_ltv/broadcast_audio_imme-diate_rendering_flag.yaml

Parameter	Size (Octets)	Value
Length	1	0x01
Type	1	0x09

6.13   Electronic Shelf Label Service

6.13.1   Display Types

Last Modified: 2023-08-15

Filename: assigned_numbers/profiles_and_services/esl/display_types.yaml

Value	Description
0x01	black white
0x02	three gray scale
0x03	four gray scale
0x04	eight gray scale
0x05	sixteen gray scale
0x06	red black white
0x07	yellow black white
0x08	red yellow black white
0x09	seven color
0x0A	sixteen color
0x0B	full RGB

7 Company Identifiers

Company identifiers are unique numbers assigned by the Bluetooth SIG to member companies requesting one.

To request a new Company Identifier, please submit a ticket to Bluetooth Support and select the Assigned Numbers category (login required). For those not familiar with the assignment process, please refer to Section 2.3 of the Assigned Numbers Process Document which is available on the Templates and Documents page.

Please allow five business days for your request to be fulfilled, and another five business days from the time your request is fulfilled to view your Company Identifier on this page.

Referenced from the following:

- Bluetooth Core Specification [Vol 4] Part E, Section 7.1.45 [4].
- Bluetooth Core Specification [Vol 4] Part E, Section 7.4.1 [4].
- Bluetooth Core Specification [Vol 4] Part E, Section 7.4.8 [4].
- Bluetooth Core Specification [Vol 4] Part E, Section 7.4.10 [4].
- Bluetooth Core Specification [Vol 4] Part E, Section 7.7.12 [4].
- Bluetooth Core Specification [Vol 4] Part E, Section 7.8.109 [4].
- Bluetooth Core Specification [Vol 6] Part B, Section 2.4.2.13 [4].
- Supplement to the Bluetooth Core Specification Part A, Section 1.4.1 [22].

7.1 Company Identifiers by Value

Last Modified: 2023-12-11

Filename: company_identifiers.yaml

Value	Name
0x0000	Ericsson AB
0x0001	Nokia Mobile Phones
0x0002	Intel Corp.
0x0003	IBM Corp.
0x0004	Toshiba Corp.
0x0005	3Com
0x0006	Microsoft
0x0007	Lucent
0x0008	Motorola
0x0009	Infineon Technologies AG
0x000A	Qualcomm Technologies International, Ltd. (QTIL)
0x000B	Silicon Wave
0x000C	Digianswer A/S
0x000D	Texas Instruments Inc.
0x000E	Parthus Technologies Inc.
0x000F	Broadcom Corporation

0x0010	Mitel Semiconductor
0x0011	Widcomm, Inc.
0x0012	Zeevo, Inc.
0x0013	Atmel Corporation
0x0014	Mitsubishi Electric Corporation
0x0015	RTX A/S
0x0016	KC Technology Inc.
0x0017	Newlogic
0x0018	Transilica, Inc.
0x0019	Rohde & Schwarz GmbH & Co. KG
0x001A	TTPCom Limited
0x001B	Signia Technologies, Inc.
0x001C	Conexant Systems Inc.
0x001D	Qualcomm
0x001E	Inventel
0x001F	AVM Berlin
0x0020	BandSpeed, Inc.
0x0021	Mansella Ltd
0x0022	NEC Corporation
0x0023	WavePlus Technology Co., Ltd.
0x0024	Alcatel
0x0025	NXP B.V.
0x0026	C Technologies
0x0027	Open Interface
0x0028	R F Micro Devices
0x0029	Hitachi Ltd
0x002A	Symbol Technologies, Inc.
0x002B	Tenovis
0x002C	Macronix International Co. Ltd.
0x002D	GCT Semiconductor
0x002E	Norwood Systems
0x002F	MewTel Technology Inc.
0x0030	ST Microelectronics
0x0031	Synopsys, Inc.
0x0032	Red-M (Communications) Ltd
0x0033	Commil Ltd

0x0034	Computer Access Technology Corporation (CATC)
0x0035	Eclipse (HQ Espana) S.L.
0x0036	Renesas Electronics Corporation
0x0037	Mobilian Corporation
0x0038	Syntronix Corporation
0x0039	Integrated System Solution Corp.
0x003A	Panasonic Holdings Corporation
0x003B	Gennum Corporation
0x003C	BlackBerry Limited
0x003D	IPextreme, Inc.
0x003E	Systems and Chips, Inc
0x003F	Bluetooth SIG, Inc
0x0040	Seiko Epson Corporation
0x0041	Integrated Silicon Solution Taiwan, Inc.
0x0042	CONWISE Technology Corporation Ltd
0x0043	PARROT AUTOMOTIVE SAS
0x0044	Socket Mobile
0x0045	Atheros Communications, Inc.
0x0046	MediaTek, Inc.
0x0047	Bluegiga
0x0048	Marvell Technology Group Ltd.
0x0049	3DSP Corporation
0x004A	Accel Semiconductor Ltd.
0x004B	Continental Automotive Systems
0x004C	Apple, Inc.
0x004D	Staccato Communications, Inc.
0x004E	Avago Technologies
0x004F	APT Ltd.
0x0050	SiRF Technology, Inc.
0x0051	Tzero Technologies, Inc.
0x0052	J&M Corporation
0x0053	Free2move AB
0x0054	3DiJoy Corporation
0x0055	Plantronics, Inc.
0x0056	Sony Ericsson Mobile Communications
0x0057	Harman International Industries, Inc.

0x0058	Vizio, Inc.
0x0059	Nordic Semiconductor ASA
0x005A	EM Microelectronic-Marin SA
0x005B	Ralink Technology Corporation
0x005C	Belkin International, Inc.
0x005D	Realtek Semiconductor Corporation
0x005E	Stonestreet One, LLC
0x005F	Wicentric, Inc.
0x0060	RivieraWaves S.A.S
0x0061	RDA Microelectronics
0x0062	Gibson Guitars
0x0063	MiCommand Inc.
0x0064	Band XI International, LLC
0x0065	HP, Inc.
0x0066	9Solutions Oy
0x0067	GN Audio A/S
0x0068	General Motors
0x0069	A&D Engineering, Inc.
0x006A	MindTree Ltd.
0x006B	Polar Electro OY
0x006C	Beautiful Enterprise Co., Ltd.
0x006D	BriarTek, Inc
0x006E	Summit Data Communications, Inc.
0x006F	Sound ID
0x0070	Monster, LLC
0x0071	connectBlue AB
0x0072	ShangHai Super Smart Electronics Co. Ltd.
0x0073	Group Sense Ltd.
0x0074	Zomm, LLC
0x0075	Samsung Electronics Co. Ltd.
0x0076	Creative Technology Ltd.
0x0077	Laird Connectivity LLC
0x0078	Nike, Inc.
0x0079	lesswire AG
0x007A	MStar Semiconductor, Inc.
0x007B	Hanlynn Technologies

0x007C	A & R Cambridge
0x007D	Seers Technology Co., Ltd.
0x007E	Sports Tracking Technologies Ltd.
0x007F	Autonet Mobile
0x0080	DeLorme Publishing Company, Inc.
0x0081	WuXi Vimicro
0x0082	DSEA A/S
0x0083	TimeKeeping Systems, Inc.
0x0084	Ludus Helsinki Ltd.
0x0085	BlueRadios, Inc.
0x0086	Equinux AG
0x0087	Garmin International, Inc.
0x0088	Ecotest
0x0089	GN Hearing A/S
0x008A	Jawbone
0x008B	Topcon Positioning Systems, LLC
0x008C	Gimbal Inc.
0x008D	Zscan Software
0x008E	Quintic Corp
0x008F	Telit Wireless Solutions GmbH
0x0090	Funai Electric Co., Ltd.
0x0091	Advanced PANMOBIL systems GmbH & Co. KG
0x0092	ThinkOptics, Inc.
0x0093	Universal Electronics, Inc.
0x0094	Airoha Technology Corp.
0x0095	NEC Lighting, Ltd.
0x0096	ODM Technology, Inc.
0x0097	ConnecteDevice Ltd.
0x0098	zero1.tv GmbH
0x0099	i.Tech Dynamic Global Distribution Ltd.
0x009A	Alpwise
0x009B	Jiangsu Toppower Automotive Electronics Co., Ltd.
0x009C	Colorfy, Inc.
0x009D	Geoforce Inc.
0x009E	Bose Corporation
0x009F	Suunto Oy

0x00A0	Kensington Computer Products Group
0x00A1	SR-Medizinelektronik
0x00A2	Vertu Corporation Limited
0x00A3	Meta Watch Ltd.
0x00A4	LINAK A/S
0x00A5	OTL Dynamics LLC
0x00A6	Panda Ocean Inc.
0x00A7	Visteon Corporation
0x00A8	ARP Devices Limited
0x00A9	MARELLI EUROPE S.P.A.
0x00AA	CAEN RFID srl
0x00AB	Ingenieur-Systemgruppe Zahn GmbH
0x00AC	Green Throttle Games
0x00AD	Peter Systemtechnik GmbH
0x00AE	Omegawave Oy
0x00AF	Cinetix
0x00B0	Passif Semiconductor Corp
0x00B1	Saris Cycling Group, Inc
0x00B2	Bekey A/S
0x00B3	Clarinox Technologies Pty. Ltd.
0x00B4	BDE Technology Co., Ltd.
0x00B5	Swirl Networks
0x00B6	Meso international
0x00B7	TreLab Ltd
0x00B8	Qualcomm Innovation Center, Inc. (QuIC)
0x00B9	Johnson Controls, Inc.
0x00BA	Starkey Hearing Technologies
0x00BB	S-Power Electronics Limited
0x00BC	Ace Sensor Inc
0x00BD	Aplix Corporation
0x00BE	AAMP of America
0x00BF	Stalmart Technology Limited
0x00C0	AMICCOM Electronics Corporation
0x00C1	Shenzhen Excelsecu Data Technology Co.,Ltd
0x00C2	Geneq Inc.
0x00C3	adidas AG

0x00C4	LG Electronics
0x00C5	Onset Computer Corporation
0x00C6	Selfly BV
0x00C7	Quuppa Oy.
0x00C8	GeLo Inc
0x00C9	Evluma
0x00CA	MC10
0x00CB	Binauric SE
0x00CC	Beats Electronics
0x00CD	Microchip Technology Inc.
0x00CE	Eve Systems GmbH
0x00CF	ARCHOS SA
0x00D0	Dexcom, Inc.
0x00D1	Polar Electro Europe B.V.
0x00D2	Dialog Semiconductor B.V.
0x00D3	Taixingbang Technology (HK) Co,. LTD.
0x00D4	Kawantech
0x00D5	Austco Communication Systems
0x00D6	Timex Group USA, Inc.
0x00D7	Qualcomm Technologies, Inc.
0x00D8	Qualcomm Connected Experiences, Inc.
0x00D9	Voyetra Turtle Beach
0x00DA	txtr GmbH
0x00DB	Snuza (Pty) Ltd
0x00DC	Procter & Gamble
0x00DD	Hosiden Corporation
0x00DE	Muzik LLC
0x00DF	Misfit Wearables Corp
0x00E0	Google
0x00E1	Danlers Ltd
0x00E2	Semilink Inc
0x00E3	inMusic Brands, Inc
0x00E4	L.S. Research, Inc.
0x00E5	Eden Software Consultants Ltd.
0x00E6	Freshtemp
0x00E7	KS Technologies

0x00E8	ACTS Technologies
0x00E9	Vtrack Systems
0x00EA	www.vtracksystems.com
0x00EB	Server Technology Inc.
0x00EC	BioResearch Associates
0x00ED	Jolly Logic, LLC
0x00EE	Above Average Outcomes, Inc.
0x00EF	Bitsplitters GmbH
0x00F0	PayPal, Inc.
0x00F1	Witron Technology Limited
0x00F2	Morse Project Inc.
0x00F3	Kent Displays Inc.
0x00F4	Nautilus Inc.
0x00F5	Smartifier Oy
0x00F6	Elcometer Limited
0x00F7	VSN Technologies, Inc.
0x00F8	AceUni Corp., Ltd.
0x00F9	StickNFind
0x00FA	Crystal Alarm AB
0x00FB	KOUKAAM a.s.
0x00FC	Delphi Corporation
0x00FD	ValenceTech Limited
0x00FE	Stanley Black and Decker
0x00FF	Typo Products, LLC
0x0100	TomTom International BV
0x0101	Fugoo, Inc.
0x0102	Keiser Corporation
0x0103	Bang & Olufsen A/S
0x0104	PLUS Location Systems Pty Ltd
0x0105	Ubiquitous Computing Technology Corporation
0x0106	Innovative Yachtter Solutions
0x0107	Demant A/S
0x0108	Chicony Electronics Co., Ltd.
0x0109	Atus BV
0x010A	Codegate Ltd
0x010B	ERi, Inc

0x010C	Transducers Direct, LLC
0x010D	DENSO TEN Limited
0x010E	Audi AG
0x010F	HiSilicon Technologies CO., LIMITED
0x0110	Nippon Seiki Co., Ltd.
0x0111	Steelseries ApS
0x0112	Visybl Inc.
0x0113	Openbrain Technologies, Co., Ltd.
0x0114	Xensr
0x0115	e.solutions
0x0116	10AK Technologies
0x0117	Wimoto Technologies Inc
0x0118	Radius Networks, Inc.
0x0119	Wize Technology Co., Ltd.
0x011A	Qualcomm Labs, Inc.
0x011B	Hewlett Packard Enterprise
0x011C	Baidu
0x011D	Arendi AG
0x011E	Skoda Auto a.s.
0x011F	Volkswagen AG
0x0120	Porsche AG
0x0121	Sino Wealth Electronic Ltd.
0x0122	AirTurn, Inc.
0x0123	Kinsa, Inc
0x0124	HID Global
0x0125	SEAT es
0x0126	Promethean Ltd.
0x0127	Salutica Allied Solutions
0x0128	GPSI Group Pty Ltd
0x0129	Nimble Devices Oy
0x012A	Changzhou Yongse Infotech Co., Ltd.
0x012B	SportIQ
0x012C	TEMEC Instruments B.V.
0x012D	Sony Corporation
0x012E	ASSA ABLOY
0x012F	Clarion Co. Inc.

0x0130	Warehouse Innovations
0x0131	Cypress Semiconductor
0x0132	MADS Inc
0x0133	Blue Maestro Limited
0x0134	Resolution Products, Ltd.
0x0135	Aireware LLC
0x0136	Silvair, Inc.
0x0137	Prestigio Plaza Ltd.
0x0138	NTEO Inc.
0x0139	Focus Systems Corporation
0x013A	Tencent Holdings Ltd.
0x013B	Allegion
0x013C	Murata Manufacturing Co., Ltd.
0x013D	WirelessWERX
0x013E	Nod, Inc.
0x013F	B&B Manufacturing Company
0x0140	Alpine Electronics (China) Co., Ltd
0x0141	FedEx Services
0x0142	Grape Systems Inc.
0x0143	Bkon Connect
0x0144	Lintech GmbH
0x0145	Novatel Wireless
0x0146	Ciright
0x0147	Mighty Cast, Inc.
0x0148	Ambimat Electronics
0x0149	Perytons Ltd.
0x014A	Tivoli Audio, LLC
0x014B	Master Lock
0x014C	Mesh-Net Ltd
0x014D	HUIZHOU DESAY SV AUTOMOTIVE CO., LTD.
0x014E	Tangerine, Inc.
0x014F	B&W Group Ltd.
0x0150	Pioneer Corporation
0x0151	OnBeep
0x0152	Vernier Software & Technology
0x0153	ROL Ergo

0x0154	Pebble Technology
0x0155	NETATMO
0x0156	Accumulate AB
0x0157	Anhui Huami Information Technology Co., Ltd.
0x0158	Inmite s.r.o.
0x0159	ChefSteps, Inc.
0x015A	micas AG
0x015B	Biomedical Research Ltd.
0x015C	Pitius Tec S.L.
0x015D	Estimote, Inc.
0x015E	Unikey Technologies, Inc.
0x015F	Timer Cap Co.
0x0160	AwoX
0x0161	yikes
0x0162	MADSGlobalNZ Ltd.
0x0163	PCH International
0x0164	Qingdao Yeelink Information Technology Co., Ltd.
0x0165	Milwaukee Electric Tools
0x0166	MISHIK Pte Ltd
0x0167	Ascensia Diabetes Care US Inc.
0x0168	Spicebox LLC
0x0169	emberlight
0x016A	Emerson Digital Cold Chain, Inc.
0x016B	Qblinks
0x016C	MYSPHERA
0x016D	LifeScan Inc
0x016E	Volantic AB
0x016F	Podo Labs, Inc
0x0170	Roche Diabetes Care AG
0x0171	Amazon.com Services LLC
0x0172	Connovate Technology Private Limited
0x0173	Kocomojo, LLC
0x0174	Everykey Inc.
0x0175	Dynamic Controls
0x0176	SentriLock
0x0177	I-SYST inc.

0x0178	CASIO COMPUTER CO., LTD.
0x0179	LAPIS Semiconductor Co.,Ltd
0x017A	Telemonitor, Inc.
0x017B	taskit GmbH
0x017C	Mercedes-Benz Group AG
0x017D	BatAndCat
0x017E	BluDotz Ltd
0x017F	XTel Wireless ApS
0x0180	Gigaset Communications GmbH
0x0181	Gecko Health Innovations, Inc.
0x0182	HOP Ubiquitous
0x0183	Walt Disney
0x0184	Nectar
0x0185	bel'apps LLC
0x0186	CORE Lighting Ltd
0x0187	Seraphim Sense Ltd
0x0188	Unico RBC
0x0189	Physical Enterprises Inc.
0x018A	Able Trend Technology Limited
0x018B	Konica Minolta, Inc.
0x018C	Wilo SE
0x018D	Extron Design Services
0x018E	Fitbit, Inc.
0x018F	Fireflies Systems
0x0190	Intelletto Technologies Inc.
0x0191	FDK CORPORATION
0x0192	Cloudleaf, Inc
0x0193	Maveric Automation LLC
0x0194	Acoustic Stream Corporation
0x0195	Zuli
0x0196	Paxton Access Ltd
0x0197	WiSilica Inc.
0x0198	VENGIT Korlatolt Felelossegu Tarsasag
0x0199	SALTO SYSTEMS S.L.
0x019A	TRON Forum
0x019B	CUBETECH s.r.o.

0x019C	Cokiya Incorporated
0x019D	CVS Health
0x019E	Ceruus
0x019F	Strainstall Ltd
0x01A0	Channel Enterprises (HK) Ltd.
0x01A1	FIAMM
0x01A2	GIGALANE.CO.,LTD
0x01A3	EROAD
0x01A4	MSA Innovation, LLC
0x01A5	Icon Health and Fitness
0x01A6	Wille Engineering
0x01A7	ENERGOUS CORPORATION
0x01A8	Taobao
0x01A9	Canon Inc.
0x01AA	Geophysical Technology Inc.
0x01AB	Meta Platforms, Inc.
0x01AC	Trividia Health, Inc.
0x01AD	FlightSafety International
0x01AE	Earlens Corporation
0x01AF	Sunrise Micro Devices, Inc.
0x01B0	Star Micronics Co., Ltd.
0x01B1	Netizens Sp. z o.o.
0x01B2	Nymi Inc.
0x01B3	Nytec, Inc.
0x01B4	Trineo Sp. z o.o.
0x01B5	Nest Labs Inc.
0x01B6	LM Technologies Ltd
0x01B7	General Electric Company
0x01B8	i+D3 S.L.
0x01B9	HANA Micron
0x01BA	Stages Cycling LLC
0x01BB	Cochlear Bone Anchored Solutions AB
0x01BC	SenionLab AB
0x01BD	Syszone Co., Ltd
0x01BE	Pulsate Mobile Ltd.
0x01BF	Hongkong OnMicro Electronics Limited

0x01C0	pironex GmbH
0x01C1	BRADATECH Corp.
0x01C2	Transenergooil AG
0x01C3	Bunch
0x01C4	DME Microelectronics
0x01C5	Bitcraze AB
0x01C6	HASWARE Inc.
0x01C7	Abiogenix Inc.
0x01C8	Poly-Control ApS
0x01C9	Avi-on
0x01CA	Laerdal Medical AS
0x01CB	Fetch My Pet
0x01CC	Sam Labs Ltd.
0x01CD	Chengdu Synwing Technology Ltd
0x01CE	HOUWA SYSTEM DESIGN, k.k.
0x01CF	BSH
0x01D0	Primus Inter Pares Ltd
0x01D1	August Home, Inc
0x01D2	Gill Electronics
0x01D3	Sky Wave Design
0x01D4	Newlab S.r.l.
0x01D5	ELAD srl
0x01D6	G-wearables inc.
0x01D7	Squadrone Systems Inc.
0x01D8	Code Corporation
0x01D9	Savant Systems LLC
0x01DA	Logitech International SA
0x01DB	Innblue Consulting
0x01DC	iParking Ltd.
0x01DD	Koninklijke Philips N.V.
0x01DE	Minelab Electronics Pty Limited
0x01DF	Bison Group Ltd.
0x01E0	Widex A/S
0x01E1	Jolla Ltd
0x01E2	Lectronix, Inc.
0x01E3	Caterpillar Inc

0x01E4	Freedom Innovations
0x01E5	Dynamic Devices Ltd
0x01E6	Technology Solutions (UK) Ltd
0x01E7	IPS Group Inc.
0x01E8	STIR
0x01E9	Sano, Inc.
0x01EA	Advanced Application Design, Inc.
0x01EB	AutoMap LLC
0x01EC	Spreadtrum Communications Shanghai Ltd
0x01ED	CuteCircuit LTD
0x01EE	Valeo Service
0x01EF	Fullpower Technologies, Inc.
0x01F0	KloudNation
0x01F1	Zebra Technologies Corporation
0x01F2	Itron, Inc.
0x01F3	The University of Tokyo
0x01F4	UTC Fire and Security
0x01F5	Cool Webthings Limited
0x01F6	DJO Global
0x01F7	Gelliner Limited
0x01F8	Anyka (Guangzhou) Microelectronics Technology Co, LTD
0x01F9	Medtronic Inc.
0x01FA	Gozio Inc.
0x01FB	Form Lifting, LLC
0x01FC	Wahoo Fitness, LLC
0x01FD	Kontakt Micro-Location Sp. z o.o.
0x01FE	Radio Systems Corporation
0x01FF	Freescale Semiconductor, Inc.
0x0200	Verifone Systems Pte Ltd. Taiwan Branch
0x0201	AR Timing
0x0202	Rigado LLC
0x0203	Kemppi Oy
0x0204	Tapcentive Inc.
0x0205	Smartbotics Inc.
0x0206	Otter Products, LLC
0x0207	STEMP Inc.

0x0208	LumiGeek LLC
0x0209	InvisionHeart Inc.
0x020A	Macnica Inc.
0x020B	Jaguar Land Rover Limited
0x020C	CoroWare Technologies, Inc
0x020D	Simplo Technology Co., LTD
0x020E	Omron Healthcare Co., LTD
0x020F	Comodule GMBH
0x0210	ikeGPS
0x0211	Telink Semiconductor Co. Ltd
0x0212	Interplan Co., Ltd
0x0213	Wyler AG
0x0214	IK Multimedia Production srl
0x0215	Lukoton Experience Oy
0x0216	MTI Ltd
0x0217	Tech4home, Lda
0x0218	Hiotech AB
0x0219	DOTT Limited
0x021A	Blue Speck Labs, LLC
0x021B	Cisco Systems, Inc
0x021C	Mobicomm Inc
0x021D	Edamic
0x021E	Goodnet, Ltd
0x021F	Luster Leaf Products Inc
0x0220	Manus Machina BV
0x0221	Mobiquity Networks Inc
0x0222	Praxis Dynamics
0x0223	Philip Morris Products S.A.
0x0224	Comarch SA
0x0225	Nestlé Nespresso S.A.
0x0226	Merlinia A/S
0x0227	LifeBEAM Technologies
0x0228	Twocanoes Labs, LLC
0x0229	Muoverti Limited
0x022A	Stamer Musikanlagen GMBH
0x022B	Tesla, Inc.

0x022C	Pharynks Corporation
0x022D	Lupine
0x022E	Siemens AG
0x022F	Huami (Shanghai) Culture Communication CO., LTD
0x0230	Foster Electric Company, Ltd
0x0231	ETA SA
0x0232	x-Senso Solutions Kft
0x0233	Shenzhen SuLong Communication Ltd
0x0234	FengFan (BeiJing) Technology Co, Ltd
0x0235	Qrio Inc
0x0236	Pitpatpet Ltd
0x0237	MSHeli s.r.l.
0x0238	Trakm8 Ltd
0x0239	JIN CO, Ltd
0x023A	Alatech Tehnology
0x023B	Beijing CarePulse Electronic Technology Co, Ltd
0x023C	Awarepoint
0x023D	ViCentra B.V.
0x023E	Raven Industries
0x023F	WaveWare Technologies Inc.
0x0240	Argenox Technologies
0x0241	Bragi GmbH
0x0242	16Lab Inc
0x0243	Masimo Corp
0x0244	Iotera Inc
0x0245	Endress+Hauser
0x0246	ACKme Networks, Inc.
0x0247	FiftyThree Inc.
0x0248	Parker Hannifin Corp
0x0249	Transcranial Ltd
0x024A	Uwatec AG
0x024B	Orlan LLC
0x024C	Blue Clover Devices
0x024D	M-Way Solutions GmbH
0x024E	Microtronics Engineering GmbH
0x024F	Schneider Schreibgeräte GmbH

0x0250	Sapphire Circuits LLC
0x0251	Lumo Bodytech Inc.
0x0252	UKC Technosolution
0x0253	Xicato Inc.
0x0254	Playbrush
0x0255	Dai Nippon Printing Co., Ltd.
0x0256	G24 Power Limited
0x0257	AdBabble Local Commerce Inc.
0x0258	Devialet SA
0x0259	ALTYOR
0x025A	University of Applied Sciences Valais/Haute Ecole Valaisanne
0x025B	Five Interactive, LLC dba Zendo
0x025C	NetEase□Hangzhou□Network co.Ltd.
0x025D	Lexmark International Inc.
0x025E	Fluke Corporation
0x025F	Yardarm Technologies
0x0260	SensaRx
0x0261	SECVRE GmbH
0x0262	Glacial Ridge Technologies
0x0263	Identiv, Inc.
0x0264	DDS, Inc.
0x0265	SMK Corporation
0x0266	Schawbel Technologies LLC
0x0267	XMI Systems SA
0x0268	Cerevo
0x0269	Torrox GmbH & Co KG
0x026A	Gemalto
0x026B	DEKA Research & Development Corp.
0x026C	Domster Tadeusz Szydlowski
0x026D	Technogym SPA
0x026E	FLEURBAEY BVBA
0x026F	Aptcode Solutions
0x0270	LSI ADL Technology
0x0271	Animas Corp
0x0272	Alps Alpine Co., Ltd.
0x0273	OCEASOFT

0x0274	Motsai Research
0x0275	Geotab
0x0276	E.G.O. Elektro-Geraetebau GmbH
0x0277	bewhere inc
0x0278	Johnson Outdoors Inc
0x0279	steute Schaltgerate GmbH & Co. KG
0x027A	Ekomini inc.
0x027B	DEFA AS
0x027C	Aseptika Ltd
0x027D	HUAWEI Technologies Co., Ltd.
0x027E	HabitAware, LLC
0x027F	ruwido austria gmbh
0x0280	ITEC corporation
0x0281	StoneL
0x0282	Sonova AG
0x0283	Maven Machines, Inc.
0x0284	Synapse Electronics
0x0285	WOWTech Canada Ltd.
0x0286	RF Code, Inc.
0x0287	Wally Ventures S.L.
0x0288	Willowbank Electronics Ltd
0x0289	SK Telecom
0x028A	Jetro AS
0x028B	Code Gears LTD
0x028C	NANOLINK APS
0x028D	IF, LLC
0x028E	RF Digital Corp
0x028F	Church & Dwight Co., Inc
0x0290	Multibit Oy
0x0291	CliniCloud Inc
0x0292	SwiftSensors
0x0293	Blue Bite
0x0294	ELIAS GmbH
0x0295	Sivantos GmbH
0x0296	Petzl
0x0297	storm power ltd

0x0298	EISST Ltd
0x0299	Inexess Technology Simma KG
0x029A	Currant, Inc.
0x029B	C2 Development, Inc.
0x029C	Blue Sky Scientific, LLC
0x029D	ALOTTAZS LABS, LLC
0x029E	Kupson spol. s r.o.
0x029F	Areus Engineering GmbH
0x02A0	Impossible Camera GmbH
0x02A1	InventureTrack Systems
0x02A2	Sera4 Ltd.
0x02A3	Itude
0x02A4	Pacific Lock Company
0x02A5	Tendyron Corporation
0x02A6	Robert Bosch GmbH
0x02A7	Illuxtron international B.V.
0x02A8	miSport Ltd.
0x02A9	Chargelib
0x02AA	Doppler Lab
0x02AB	BBPOS Limited
0x02AC	RTB Elektronik GmbH & Co. KG
0x02AD	Rx Networks, Inc.
0x02AE	WeatherFlow, Inc.
0x02AF	Technicolor USA Inc.
0x02B0	Bestechnic(Shanghai),Ltd
0x02B1	Raden Inc
0x02B2	Oura Health Oy
0x02B3	CLABER S.P.A.
0x02B4	Hyginex, Inc.
0x02B5	HANSHIN ELECTRIC RAILWAY CO.,LTD.
0x02B6	Schneider Electric
0x02B7	Oort Technologies LLC
0x02B8	Chrono Therapeutics
0x02B9	Rinnai Corporation
0x02BA	Swissprime Technologies AG
0x02BB	Koha.,Co.Ltd

0x02BC	Genevac Ltd
0x02BD	Chemtronics
0x02BE	Seguro Technology Sp. z o.o.
0x02BF	Redbird Flight Simulations
0x02C0	Dash Robotics
0x02C1	LINE Corporation
0x02C2	Guillemot Corporation
0x02C3	Techtronic Power Tools Technology Limited
0x02C4	Wilson Sporting Goods
0x02C5	Lenovo (Singapore) Pte Ltd.
0x02C6	Ayatan Sensors
0x02C7	Electronics Tomorrow Limited
0x02C8	OneSpan
0x02C9	PayRange Inc.
0x02CA	ABOV Semiconductor
0x02CB	AINA-Wireless Inc.
0x02CC	Eijkelkamp Soil & Water
0x02CD	BMA ergonomics b.v.
0x02CE	Teva Branded Pharmaceutical Products R&D, Inc.
0x02CF	Anima
0x02D0	3M
0x02D1	Empatica Srl
0x02D2	Afero, Inc.
0x02D3	Powercast Corporation
0x02D4	Secuyou ApS
0x02D5	OMRON Corporation
0x02D6	Send Solutions
0x02D7	NIPPON SYSTEMWARE CO.,LTD.
0x02D8	Neosfar
0x02D9	Fliegl Agrartechnik GmbH
0x02DA	Gilvader
0x02DB	Digi International Inc (R)
0x02DC	DeWalch Technologies, Inc.
0x02DD	Flint Rehabilitation Devices, LLC
0x02DE	Samsung SDS Co., Ltd.
0x02DF	Blur Product Development

0x02E0	University of Michigan
0x02E1	Victron Energy BV
0x02E2	NTT docomo
0x02E3	Carmanah Technologies Corp.
0x02E4	Bytestorm Ltd.
0x02E5	Espressif Systems (Shanghai) Co., Ltd.
0x02E6	Unwire
0x02E7	Connected Yard, Inc.
0x02E8	American Music Environments
0x02E9	Sensogram Technologies, Inc.
0x02EA	Fujitsu Limited
0x02EB	Ardic Technology
0x02EC	Delta Systems, Inc
0x02ED	HTC Corporation
0x02EE	Citizen Holdings Co., Ltd.
0x02EF	SMART-INNOVATION.inc
0x02F0	Blackrat Software
0x02F1	The Idea Cave, LLC
0x02F2	GoPro, Inc.
0x02F3	AuthAir, Inc
0x02F4	Vensi, Inc.
0x02F5	Indagem Tech LLC
0x02F6	Intemo Technologies
0x02F7	DreamVisions co., Ltd.
0x02F8	Runteq Oy Ltd
0x02F9	IMAGINATION TECHNOLOGIES LTD
0x02FA	CoSTAR TEchnologies
0x02FB	Clarius Mobile Health Corp.
0x02FC	Shanghai Frequen Microelectronics Co., Ltd.
0x02FD	Uwanna, Inc.
0x02FE	Lierda Science & Technology Group Co., Ltd.
0x02FF	Silicon Laboratories
0x0300	World Moto Inc.
0x0301	Giatec Scientific Inc.
0x0302	Loop Devices, Inc
0x0303	IACA electronique

0x0304	Proxy Technologies, Inc.
0x0305	Swipp ApS
0x0306	Life Laboratory Inc.
0x0307	FUJI INDUSTRIAL CO.,LTD.
0x0308	Surefire, LLC
0x0309	Dolby Labs
0x030A	Ellisys
0x030B	Magnitude Lighting Converters
0x030C	Hilti AG
0x030D	Devdata S.r.l.
0x030E	Deviceworx
0x030F	Shortcut Labs
0x0310	SGL Italia S.r.l.
0x0311	PEEQ DATA
0x0312	Ducere Technologies Pvt Ltd
0x0313	DiveNav, Inc.
0x0314	RIIG AI Sp. z o.o.
0x0315	Thermo Fisher Scientific
0x0316	AG Measurematics Pvt. Ltd.
0x0317	CHUO Electronics CO., LTD.
0x0318	Aspenta International
0x0319	Eugster Frismag AG
0x031A	Wurth Elektronik eiSos GmbH & Co. KG
0x031B	HQ Inc
0x031C	Lab Sensor Solutions
0x031D	Enterlab ApS
0x031E	Eyefi, Inc.
0x031F	MetaSystem S.p.A.
0x0320	SONO ELECTRONICS. CO., LTD
0x0321	Jewelbots
0x0322	Compumedics Limited
0x0323	Rotor Bike Components
0x0324	Astro, Inc.
0x0325	Amotus Solutions
0x0326	Healthwear Technologies (Changzhou)Ltd
0x0327	Essex Electronics

0x0328	Grundfos A/S
0x0329	Eargo, Inc.
0x032A	Electronic Design Lab
0x032B	ESYLUX
0x032C	NIPPON SMT.CO.,Ltd
0x032D	BM innovations GmbH
0x032E	indoormap
0x032F	OttoQ Inc
0x0330	North Pole Engineering
0x0331	3flares Technologies Inc.
0x0332	Electrocompaniet A.S.
0x0333	Mul-T-Lock
0x0334	Airthings ASA
0x0335	Enlighted Inc
0x0336	GISTIC
0x0337	AJP2 Holdings, LLC
0x0338	COBI GmbH
0x0339	Blue Sky Scientific, LLC
0x033A	Appception, Inc.
0x033B	Courtney Thorne Limited
0x033C	Virtuosys
0x033D	TPV Technology Limited
0x033E	Monitra SA
0x033F	Automation Components, Inc.
0x0340	Letsense s.r.l.
0x0341	Etesian Technologies LLC
0x0342	GERTEC BRASIL LTDA.
0x0343	Drekker Development Pty. Ltd.
0x0344	Whirl Inc
0x0345	Locus Positioning
0x0346	Acuity Brands Lighting, Inc
0x0347	Prevent Biometrics
0x0348	Arioneo
0x0349	VersaMe
0x034A	Vaddio
0x034B	Libratone A/S

0x034C	HM Electronics, Inc.
0x034D	TASER International, Inc.
0x034E	SafeTrust Inc.
0x034F	Heartland Payment Systems
0x0350	Bitstrata Systems Inc.
0x0351	Pieps GmbH
0x0352	iRiding(Xiamen)Technology Co.,Ltd.
0x0353	Alpha Audiotronics, Inc.
0x0354	TOPPAN FORMS CO.,LTD.
0x0355	Sigma Designs, Inc.
0x0356	Spectrum Brands, Inc.
0x0357	Polymap Wireless
0x0358	MagniWare Ltd.
0x0359	Novotec Medical GmbH
0x035A	Phillips-Medisize A/S
0x035B	Matrix Inc.
0x035C	Eaton Corporation
0x035D	KYS
0x035E	Naya Health, Inc.
0x035F	Acromag
0x0360	Insulet Corporation
0x0361	Wellinks Inc.
0x0362	ON Semiconductor
0x0363	FREELAP SA
0x0364	Favero Electronics Srl
0x0365	BioMech Sensor LLC
0x0366	BOLTT Sports technologies Private limited
0x0367	Saphe International
0x0368	Metormote AB
0x0369	littleBits
0x036A	SetPoint Medical
0x036B	BRControls Products BV
0x036C	Zipcar
0x036D	AirBolt Pty Ltd
0x036E	MOTIVE TECHNOLOGIES, INC.
0x036F	Motiv, Inc.

0x0370	Wazombi Labs OÜ
0x0371	ORBCOMM
0x0372	Nixie Labs, Inc.
0x0373	AppNearMe Ltd
0x0374	Holman Industries
0x0375	Expain AS
0x0376	Electronic Temperature Instruments Ltd
0x0377	Plejd AB
0x0378	Propeller Health
0x0379	Shenzhen iMCO Electronic Technology Co.,Ltd
0x037A	Algoria
0x037B	Apption Labs Inc.
0x037C	Cronologics Corporation
0x037D	MICRODIA Ltd.
0x037E	lulabytes S.L.
0x037F	Société des Produits Nestlé S.A.
0x0380	LLC ”MEGA-F service”
0x0381	Sharp Corporation
0x0382	Precision Outcomes Ltd
0x0383	Kronos Incorporated
0x0384	OCOSMOS Co., Ltd.
0x0385	Embedded Electronic Solutions Ltd. dba e2Solutions
0x0386	Aterica Inc.
0x0387	BluStor PMC, Inc.
0x0388	Kapsch TrafficCom AB
0x0389	ActiveBlu Corporation
0x038A	Kohler Mira Limited
0x038B	Noke
0x038C	Appion Inc.
0x038D	Resmed Ltd
0x038E	Crownstone B.V.
0x038F	Xiaomi Inc.
0x0390	INFOTECH s.r.o.
0x0391	Thingsquare AB
0x0392	T&D
0x0393	LAVAZZA S.p.A.

0x0394	Netclearance Systems, Inc.
0x0395	SDATAWAY
0x0396	BLOKS GmbH
0x0397	LEGO System A/S
0x0398	Thetatronics Ltd
0x0399	Nikon Corporation
0x039A	NeST
0x039B	South Silicon Valley Microelectronics
0x039C	ALE International
0x039D	CareView Communications, Inc.
0x039E	SchoolBoard Limited
0x039F	Molex Corporation
0x03A0	IVT Wireless Limited
0x03A1	Alpine Labs LLC
0x03A2	Candura Instruments
0x03A3	SmartMovt Technology Co., Ltd
0x03A4	Token Zero Ltd
0x03A5	ACE CAD Enterprise Co., Ltd. (ACECAD)
0x03A6	Medela, Inc
0x03A7	AeroScout
0x03A8	Esrille Inc.
0x03A9	THINKERLY SRL
0x03AA	Exon Sp. z o.o.
0x03AB	Meizu Technology Co., Ltd.
0x03AC	Smablo LTD
0x03AD	XiQ
0x03AE	Allswell Inc.
0x03AF	Comm-N-Sense Corp DBA Verigo
0x03B0	VIBRADORM GmbH
0x03B1	Otodata Wireless Network Inc.
0x03B2	Propagation Systems Limited
0x03B3	Midwest Instruments & Controls
0x03B4	Alpha Nodus, inc.
0x03B5	petPOMM, Inc
0x03B6	Mattel
0x03B7	Airbly Inc.

0x03B8	A-Safe Limited
0x03B9	FREDERIQUE CONSTANT SA
0x03BA	Maxscend Microelectronics Company Limited
0x03BB	Abbott
0x03BC	ASB Bank Ltd
0x03BD	amadas
0x03BE	Applied Science, Inc.
0x03BF	iLumi Solutions Inc.
0x03C0	Arch Systems Inc.
0x03C1	Ember Technologies, Inc.
0x03C2	Snapchat Inc
0x03C3	Casambi Technologies Oy
0x03C4	Pico Technology Inc.
0x03C5	St. Jude Medical, Inc.
0x03C6	Intricon
0x03C7	Structural Health Systems, Inc.
0x03C8	Avvel International
0x03C9	Gallagher Group
0x03CA	In2things Automation Pvt. Ltd.
0x03CB	SYSDEV Srl
0x03CC	Vonkil Technologies Ltd
0x03CD	Wynd Technologies, Inc.
0x03CE	CONTRINEX S.A.
0x03CF	MIRA, Inc.
0x03D0	Watteam Ltd
0x03D1	Density Inc.
0x03D2	IOT Pot India Private Limited
0x03D3	Sigma Connectivity AB
0x03D4	PEG PEREGO SPA
0x03D5	Wyzelink Systems Inc.
0x03D6	Yota Devices LTD
0x03D7	FINSECUR
0x03D8	Zen-Me Labs Ltd
0x03D9	3IWare Co., Ltd.
0x03DA	EnOcean GmbH
0x03DB	Instabeat, Inc

`0x03DC`	Nima Labs
`0x03DD`	Andreas Stihl AG & Co. KG
`0x03DE`	Nathan Rhoades LLC
`0x03DF`	Grob Technologies, LLC
`0x03E0`	Actions (Zhuhai) Technology Co., Limited
`0x03E1`	SPD Development Company Ltd
`0x03E2`	Sensoan Oy
`0x03E3`	Qualcomm Life Inc
`0x03E4`	Chip-ing AG
`0x03E5`	ffly4u
`0x03E6`	IoT Instruments Oy
`0x03E7`	TRUE Fitness Technology
`0x03E8`	Reiner Kartengeraete GmbH & Co. KG.
`0x03E9`	SHENZHEN LEMONJOY TECHNOLOGY CO., LTD.
`0x03EA`	Hello Inc.
`0x03EB`	Ozo Edu, Inc.
`0x03EC`	Jigowatts Inc.
`0x03ED`	BASIC MICRO.COM,INC.
`0x03EE`	CUBE TECHNOLOGIES
`0x03EF`	foolography GmbH
`0x03F0`	CLINK
`0x03F1`	Hestan Smart Cooking Inc.
`0x03F2`	WindowMaster A/S
`0x03F3`	Flowscape AB
`0x03F4`	PAL Technologies Ltd
`0x03F5`	WHERE, Inc.
`0x03F6`	Iton Technology Corp.
`0x03F7`	Owl Labs Inc.
`0x03F8`	Rockford Corp.
`0x03F9`	Becon Technologies Co.,Ltd.
`0x03FA`	Vyassoft Technologies Inc
`0x03FB`	Nox Medical
`0x03FC`	Kimberly-Clark
`0x03FD`	Trimble Inc.
`0x03FE`	Littelfuse
`0x03FF`	Withings

0x0400	i-developer IT Beratung UG
0x0401	Relations Inc.
0x0402	Sears Holdings Corporation
0x0403	Gantner Electronic GmbH
0x0404	Authomate Inc
0x0405	Vertex International, Inc.
0x0406	Airtago
0x0407	Swiss Audio SA
0x0408	ToGetHome Inc.
0x0409	RYSE INC.
0x040A	ZF OPENMATICS s.r.o.
0x040B	Jana Care Inc.
0x040C	Senix Corporation
0x040D	NorthStar Battery Company, LLC
0x040E	SKF (U.K.) Limited
0x040F	CO-AX Technology, Inc.
0x0410	Fender Musical Instruments
0x0411	Luidia Inc
0x0412	SEFAM
0x0413	Wireless Cables Inc
0x0414	Lightning Protection International Pty Ltd
0x0415	Uber Technologies Inc
0x0416	SODA GmbH
0x0417	Fatigue Science
0x0419	Novalogy LTD
0x041A	Friday Labs Limited
0x041B	OrthoAccel Technologies
0x041C	WaterGuru, Inc.
0x041D	Benning Elektrotechnik und Elektronik GmbH & Co. KG
0x041E	Dell Computer Corporation
0x041F	Kopin Corporation
0x0420	TecBakery GmbH
0x0421	Backbone Labs, Inc.
0x0422	DELSEY SA
0x0423	Chargifi Limited
0x0424	Trainesense Ltd.

0x0425	Unify Software and Solutions GmbH & Co. KG
0x0426	Husqvarna AB
0x0427	Focus fleet and fuel management inc
0x0428	SmallLoop, LLC
0x0429	Prolon Inc.
0x042A	BD Medical
0x042B	iMicroMed Incorporated
0x042C	Ticto N.V.
0x042D	Meshtech AS
0x042E	MemCachier Inc.
0x042F	Danfoss A/S
0x0430	SnapStyk Inc.
0x0431	Alticor Inc.
0x0432	Silk Labs, Inc.
0x0433	Pillsy Inc.
0x0434	Hatch Baby, Inc.
0x0435	Blocks Wearables Ltd.
0x0436	Drayson Technologies (Europe) Limited
0x0437	eBest IOT Inc.
0x0438	Helvar Ltd
0x0439	Radiance Technologies
0x043A	Nuheara Limited
0x043B	Appside co., ltd.
0x043C	DeLaval
0x043D	Coiler Corporation
0x043E	Thermomedics, Inc.
0x043F	Tentacle Sync GmbH
0x0440	Valencell, Inc.
0x0441	iProtoXi Oy
0x0442	SECOM CO., LTD.
0x0443	Tucker International LLC
0x0444	Metanate Limited
0x0445	Kobian Canada Inc.
0x0446	NETGEAR, Inc.
0x0447	Fabtronics Australia Pty Ltd
0x0448	Grand Centrix GmbH

0x0449	1UP USA.com llc
0x044A	SHIMANO INC.
0x044B	Nain Inc.
0x044C	LifeStyle Lock, LLC
0x044D	VEGA Grieshaber KG
0x044E	Xtrava Inc.
0x044F	TTS Tooltechnic Systems AG & Co. KG
0x0450	Teenage Engineering AB
0x0451	Tunstall Nordic AB
0x0452	Svep Design Center AB
0x0453	Qorvo Utrecht B.V.
0x0454	Sphinx Electronics GmbH & Co KG
0x0455	Atomation
0x0456	Nemik Consulting Inc
0x0457	RF INNOVATION
0x0458	Mini Solution Co., Ltd.
0x0459	Lumenetix, Inc
0x045A	2048450 Ontario Inc
0x045B	SPACEEK LTD
0x045C	Delta T Corporation
0x045D	Boston Scientific Corporation
0x045E	Nuviz, Inc.
0x045F	Real Time Automation, Inc.
0x0460	Kolibree
0x0461	vhf elektronik GmbH
0x0462	Bonsai Systems GmbH
0x0463	Fathom Systems Inc.
0x0464	Bellman & Symfon
0x0465	International Forte Group LLC
0x0466	CycleLabs Solutions inc.
0x0467	Codenex Oy
0x0468	Kynesim Ltd
0x0469	Palago AB
0x046A	INSIGMA INC.
0x046B	PMD Solutions
0x046C	Qingdao Realtime Technology Co., Ltd.

0x046D	BEGA Gantenbrink-Leuchten KG
0x046E	Pambor Ltd.
0x046F	Develco Products A/S
0x0470	iDesign s.r.l.
0x0471	TiVo Corp
0x0472	Control-J Pty Ltd
0x0473	Steelcase, Inc.
0x0474	iApartment co., ltd.
0x0475	Icom inc.
0x0476	Oxstren Wearable Technologies Private Limited
0x0477	Blue Spark Technologies
0x0478	FarSite Communications Limited
0x0479	mywerk system GmbH
0x047A	Sinosun Technology Co., Ltd.
0x047B	MIYOSHI ELECTRONICS CORPORATION
0x047C	POWERMAT LTD
0x047D	Occly LLC
0x047E	OurHub Dev IvS
0x047F	Pro-Mark, Inc.
0x0480	Dynometrics Inc.
0x0481	Quintrax Limited
0x0482	POS Tuning Udo Vosshenrich GmbH & Co. KG
0x0483	Multi Care Systems B.V.
0x0484	Revol Technologies Inc
0x0485	SKIDATA AG
0x0486	DEV TECNOLOGIA INDUSTRIA, COMERCIO E MANUTENCAO DE EQUIPAMENTOS LTDA. - ME
0x0487	Centrica Connected Home
0x0488	Automotive Data Solutions Inc
0x0489	Igarashi Engineering
0x048A	Taelek Oy
0x048B	CP Electronics Limited
0x048C	Vectronix AG
0x048D	S-Labs Sp. z o.o.
0x048E	Companion Medical, Inc.
0x048F	BlueKitchen GmbH

0x0490	Matting AB
0x0491	SOREX - Wireless Solutions GmbH
0x0492	ADC Technology, Inc.
0x0493	Lynxemi Pte Ltd
0x0494	SENNHEISER electronic GmbH & Co. KG
0x0495	LMT Mercer Group, Inc
0x0496	Polymorphic Labs LLC
0x0497	Cochlear Limited
0x0498	METER Group, Inc. USA
0x0499	Ruuvi Innovations Ltd.
0x049A	Situne AS
0x049B	nVisti, LLC
0x049C	DyOcean
0x049D	Uhlmann & Zacher GmbH
0x049E	AND!XOR LLC
0x049F	Popper Pay AB
0x04A0	Vypin, LLC
0x04A1	PNI Sensor Corporation
0x04A2	ovrEngineered, LLC
0x04A3	GT-tronics HK Ltd
0x04A4	Herbert Waldmann GmbH & Co. KG
0x04A5	Guangzhou FiiO Electronics Technology Co.,Ltd
0x04A6	Vinetech Co., Ltd
0x04A7	Dallas Logic Corporation
0x04A8	BioTex, Inc.
0x04A9	DISCOVERY SOUND TECHNOLOGY, LLC
0x04AA	LINKIO SAS
0x04AB	Harbortronics, Inc.
0x04AC	Undagrid B.V.
0x04AD	Shure Inc
0x04AE	ERM Electronic Systems LTD
0x04AF	BIOROWER Handelsagentur GmbH
0x04B0	Weba Sport und Med. Artikel GmbH
0x04B1	Kartographers Technologies Pvt. Ltd.
0x04B2	The Shadow on the Moon
0x04B3	mobike (Hong Kong) Limited

0x04B4	Inuheat Group AB
0x04B5	Swiftronix AB
0x04B6	Diagnoptics Technologies
0x04B7	Analog Devices, Inc.
0x04B8	Soraa Inc.
0x04B9	CSR Building Products Limited
0x04BA	Crestron Electronics, Inc.
0x04BB	Neatebox Ltd
0x04BC	Draegerwerk AG & Co. KGaA
0x04BD	AlbynMedical
0x04BE	Averos FZCO
0x04BF	VIT Initiative, LLC
0x04C0	Statsports International
0x04C1	Sospitas, s.r.o.
0x04C2	Dmet Products Corp.
0x04C3	Mantracourt Electronics Limited
0x04C4	TeAM Hutchins AB
0x04C5	Seibert Williams Glass, LLC
0x04C6	Insta GmbH
0x04C7	Svantek Sp. z o.o.
0x04C8	Shanghai Flyco Electrical Appliance Co., Ltd.
0x04C9	Thornwave Labs Inc
0x04CA	Steiner-Optik GmbH
0x04CB	Novo Nordisk A/S
0x04CC	Enflux Inc.
0x04CD	Safetech Products LLC
0x04CE	GOOOLED S.R.L.
0x04CF	DOM Sicherheitstechnik GmbH & Co. KG
0x04D0	Olympus Corporation
0x04D1	KTS GmbH
0x04D2	Anloq Technologies Inc.
0x04D3	Queercon, Inc
0x04D4	5th Element Ltd
0x04D5	Gooee Limited
0x04D6	LUGLOC LLC
0x04D7	Blincam, Inc.

0x04D8	FUJIFILM Corporation
0x04D9	RM Acquisition LLC
0x04DA	Franceschi Marina snc
0x04DB	Engineered Audio, LLC.
0x04DC	IOTTIVE (OPC) PRIVATE LIMITED
0x04DD	4MOD Technology
0x04DE	Lutron Electronics Co., Inc.
0x04DF	Emerson Electric Co.
0x04E0	Guardtec, Inc.
0x04E1	REACTEC LIMITED
0x04E2	EllieGrid
0x04E3	Under Armour
0x04E4	Woodenshark
0x04E5	Avack Oy
0x04E6	Smart Solution Technology, Inc.
0x04E7	REHABTRONICS INC.
0x04E8	STABILO International
0x04E9	Busch Jaeger Elektro GmbH
0x04EA	Pacific Bioscience Laboratories, Inc
0x04EB	Bird Home Automation GmbH
0x04EC	Motorola Solutions
0x04ED	R9 Technology, Inc.
0x04EE	Auxivia
0x04EF	DaisyWorks, Inc
0x04F0	Kosi Limited
0x04F1	Theben AG
0x04F2	InDreamer Techsol Private Limited
0x04F3	Cerevast Medical
0x04F4	ZanCompute Inc.
0x04F5	Pirelli Tyre S.P.A.
0x04F6	McLear Limited
0x04F7	Shenzhen Goodix Technology Co., Ltd
0x04F8	Convergence Systems Limited
0x04F9	Interactio
0x04FA	Androtec GmbH
0x04FB	Benchmark Drives GmbH & Co. KG

0x04FC	SwingLync L. L. C.
0x04FD	Tapkey GmbH
0x04FE	Woosim Systems Inc.
0x04FF	Microsemi Corporation
0x0500	Wiliot LTD.
0x0501	Polaris IND
0x0502	Specifi-Kali LLC
0x0503	Locoroll, Inc
0x0504	PHYPLUS Inc
0x0505	InPlay, Inc.
0x0506	Hager
0x0507	Yellowcog
0x0508	Axes System sp. z o. o.
0x0509	Garage Smart, Inc.
0x050A	Shake-on B.V.
0x050B	Vibrissa Inc.
0x050C	OSRAM GmbH
0x050D	TRSystems GmbH
0x050E	Yichip Microelectronics (Hangzhou) Co.,Ltd.
0x050F	Foundation Engineering LLC
0x0510	UNI-ELECTRONICS, INC.
0x0511	Brookfield Equinox LLC
0x0512	Soprod SA
0x0513	9974091 Canada Inc.
0x0514	FIBRO GmbH
0x0515	RB Controls Co., Ltd.
0x0516	Footmarks
0x0517	Amtronic Sverige AB
0x0518	MAMORIO.inc
0x0519	Tyto Life LLC
0x051A	Leica Camera AG
0x051B	Angee Technologies Ltd.
0x051C	EDPS
0x051D	OFF Line Co., Ltd.
0x051E	Detect Blue Limited
0x051F	Setec Pty Ltd

0x0520	Target Corporation
0x0521	IAI Corporation
0x0522	NS Tech, Inc.
0x0523	MTG Co., Ltd.
0x0524	Hangzhou iMagic Technology Co., Ltd
0x0525	HONGKONG NANO IC TECHNOLOGIES CO., LIMITED
0x0526	Honeywell International Inc.
0x0527	Albrecht JUNG
0x0528	Lunera Lighting Inc.
0x0529	Lumen UAB
0x052A	Keynes Controls Ltd
0x052B	Novartis AG
0x052C	Geosatis SA
0x052D	EXFO, Inc.
0x052E	LEDVANCE GmbH
0x052F	Center ID Corp.
0x0530	Adolene, Inc.
0x0531	D&M Holdings Inc.
0x0532	CRESCO Wireless, Inc.
0x0533	Nura Operations Pty Ltd
0x0534	Frontiergadget, Inc.
0x0535	Smart Component Technologies Limited
0x0536	ZTR Control Systems LLC
0x0537	MetaLogics Corporation
0x0538	Medela AG
0x0539	OPPLE Lighting Co., Ltd
0x053A	Savitech Corp.,
0x053B	prodigy
0x053C	Screenovate Technologies Ltd
0x053D	TESA SA
0x053E	CLIM8 LIMITED
0x053F	Silergy Corp
0x0540	SilverPlus, Inc
0x0541	Sharknet srl
0x0542	Mist Systems, Inc.
0x0543	MIWA LOCK CO.,Ltd

0x0544	OrthoSensor, Inc.
0x0545	Candy Hoover Group s.r.l
0x0546	Apexar Technologies S.A.
0x0547	LOGICDATA Electronic & Software Entwicklungs GmbH
0x0548	Knick Elektronische Messgeraete GmbH & Co. KG
0x0549	Smart Technologies and Investment Limited
0x054A	Linough Inc.
0x054B	Advanced Electronic Designs, Inc.
0x054C	Carefree Scott Fetzer Co Inc
0x054D	Sensome
0x054E	FORTRONIK storitve d.o.o.
0x054F	Sinnoz
0x0550	Versa Networks, Inc.
0x0551	Sylero
0x0552	Avempace SARL
0x0553	Nintendo Co., Ltd.
0x0554	National Instruments
0x0555	KROHNE Messtechnik GmbH
0x0556	Otodynamics Ltd
0x0557	Arwin Technology Limited
0x0558	benegear, inc.
0x0559	Newcon Optik
0x055A	CANDY HOUSE, Inc.
0x055B	FRANKLIN TECHNOLOGY INC
0x055C	Lely
0x055D	Valve Corporation
0x055E	Hekatron Vertriebs GmbH
0x055F	PROTECH S.A.S. DI GIRARDI ANDREA & C.
0x0560	Sarita CareTech APS
0x0561	Finder S.p.A.
0x0562	Thalmic Labs Inc.
0x0563	Steinel Vertrieb GmbH
0x0564	Beghelli Spa
0x0565	Beijing Smartspace Technologies Inc.
0x0566	CORE TRANSPORT TECHNOLOGIES NZ LIMITED
0x0567	Xiamen Everesports Goods Co., Ltd

0x0568	Bodyport Inc.
0x0569	Audionics System, INC.
0x056A	Flipnavi Co.,Ltd.
0x056B	Rion Co., Ltd.
0x056C	Long Range Systems, LLC
0x056D	Redmond Industrial Group LLC
0x056E	VIZPIN INC.
0x056F	BikeFinder AS
0x0570	Consumer Sleep Solutions LLC
0x0571	PSIKICK, INC.
0x0572	AntTail.com
0x0573	Lighting Science Group Corp.
0x0574	AFFORDABLE ELECTRONICS INC
0x0575	Integral Memroy Plc
0x0576	Globalstar, Inc.
0x0577	True Wearables, Inc.
0x0578	Wellington Drive Technologies Ltd
0x0579	Ensemble Tech Private Limited
0x057A	OMNI Remotes
0x057B	Duracell U.S. Operations Inc.
0x057C	Toor Technologies LLC
0x057D	Instinct Performance
0x057E	Beco, Inc
0x057F	Scuf Gaming International, LLC
0x0580	ARANZ Medical Limited
0x0581	LYS TECHNOLOGIES LTD
0x0582	Breakwall Analytics, LLC
0x0583	Code Blue Communications
0x0584	Gira Giersiepen GmbH & Co. KG
0x0585	Hearing Lab Technology
0x0586	LEGRAND
0x0587	Derichs GmbH
0x0588	ALT-TEKNIK LLC
0x0589	Star Technologies
0x058A	START TODAY CO.,LTD.
0x058B	Maxim Integrated Products

0x058C	Fracarro Radioindustrie SRL
0x058D	Jungheinrich Aktiengesellschaft
0x058E	Meta Platforms Technologies, LLC
0x058F	HENDON SEMICONDUCTORS PTY LTD
0x0590	Pur3 Ltd
0x0591	Viasat Group S.p.A.
0x0592	IZITHERM
0x0593	Spaulding Clinical Research
0x0594	Kohler Company
0x0595	Inor Process AB
0x0596	My Smart Blinds
0x0597	RadioPulse Inc
0x0598	rapitag GmbH
0x0599	Lazlo326, LLC.
0x059A	Teledyne Lecroy, Inc.
0x059B	Dataflow Systems Limited
0x059C	Macrogiga Electronics
0x059D	Tandem Diabetes Care
0x059E	Polycom, Inc.
0x059F	Fisher & Paykel Healthcare
0x05A0	RCP Software Oy
0x05A1	Shanghai Xiaoyi Technology Co.,Ltd.
0x05A2	ADHERIUM(NZ) LIMITED
0x05A3	Axiomware Systems Incorporated
0x05A4	O. E. M. Controls, Inc.
0x05A5	Kiiroo BV
0x05A6	Telecon Mobile Limited
0x05A7	Sonos Inc
0x05A8	Tom Allebrandi Consulting
0x05A9	Monidor
0x05AA	Tramex Limited
0x05AB	Nofence AS
0x05AC	GoerTek Dynaudio Co., Ltd.
0x05AD	INIA
0x05AE	CARMATE MFG.CO.,LTD
0x05AF	OV LOOP, INC.

0x05B0	NewTec GmbH
0x05B1	Medallion Instrumentation Systems
0x05B2	CAREL INDUSTRIES S.P.A.
0x05B3	Parabit Systems, Inc.
0x05B4	White Horse Scientific ltd
0x05B5	verisilicon
0x05B6	Elecs Industry Co.,Ltd.
0x05B7	Beijing Pinecone Electronics Co.,Ltd.
0x05B8	Ambystoma Labs Inc.
0x05B9	Suzhou Pairlink Network Technology
0x05BA	igloohome
0x05BB	Oxford Metrics plc
0x05BC	Leviton Mfg. Co., Inc.
0x05BD	ULC Robotics Inc.
0x05BE	RFID Global by Softwork SrL
0x05BF	Real-World-Systems Corporation
0x05C0	Nalu Medical, Inc.
0x05C1	P.I.Engineering
0x05C2	Grote Industries
0x05C3	Runtime, Inc.
0x05C4	Codecoup sp. z o.o. sp. k.
0x05C5	SELVE GmbH & Co. KG
0x05C6	Smart Animal Training Systems, LLC
0x05C7	Lippert Components, INC
0x05C8	SOMFY SAS
0x05C9	TBS Electronics B.V.
0x05CA	MHL Custom Inc
0x05CB	LucentWear LLC
0x05CC	WATTS ELECTRONICS
0x05CD	RJ Brands LLC
0x05CE	V-ZUG Ltd
0x05CF	Biowatch SA
0x05D0	Anova Applied Electronics
0x05D1	Lindab AB
0x05D2	frogblue TECHNOLOGY GmbH
0x05D3	Acurable Limited

0x05D4	LAMPLIGHT Co., Ltd.
0x05D5	TEGAM, Inc.
0x05D6	Zhuhai Jieli technology Co.,Ltd
0x05D7	modum.io AG
0x05D8	Farm Jenny LLC
0x05D9	Toyo Electronics Corporation
0x05DA	Applied Neural Research Corp
0x05DB	Avid Identification Systems, Inc.
0x05DC	Petronics Inc.
0x05DD	essentim GmbH
0x05DE	QT Medical INC.
0x05DF	VIRTUALCLINIC.DIRECT LIMITED
0x05E0	Viper Design LLC
0x05E1	Human, Incorporated
0x05E2	stAPPtronics GmbH
0x05E3	Elemental Machines, Inc.
0x05E4	Taiyo Yuden Co., Ltd
0x05E5	INEO ENERGY& SYSTEMS
0x05E6	Motion Instruments Inc.
0x05E7	PressurePro
0x05E8	COWBOY
0x05E9	iconmobile GmbH
0x05EA	ACS-Control-System GmbH
0x05EB	Bayerische Motoren Werke AG
0x05EC	Gycom Svenska AB
0x05ED	Fuji Xerox Co., Ltd
0x05EE	Wristcam Inc.
0x05EF	SIKOM AS
0x05F0	beken
0x05F1	The Linux Foundation
0x05F2	Try and E CO.,LTD.
0x05F3	SeeScan
0x05F4	Clearity, LLC
0x05F5	GS TAG
0x05F6	DPTechnics
0x05F7	TRACMO, INC.

0x05F8	Anki Inc.
0x05F9	Hagleitner Hygiene International GmbH
0x05FA	Konami Sports Life Co., Ltd.
0x05FB	Arblet Inc.
0x05FC	Masbando GmbH
0x05FD	Innoseis
0x05FE	Niko nv
0x05FF	Wellnomics Ltd
0x0600	iRobot Corporation
0x0601	Schrader Electronics
0x0602	Geberit International AG
0x0603	Fourth Evolution Inc
0x0604	Cell2Jack LLC
0x0605	FMW electronic Futterer u. Maier-Wolf OHG
0x0606	John Deere
0x0607	Rookery Technology Ltd
0x0608	KeySafe-Cloud
0x0609	BUCHI Labortechnik AG
0x060A	IQAir AG
0x060B	Triax Technologies Inc
0x060C	Vuzix Corporation
0x060D	TDK Corporation
0x060E	Blueair AB
0x060F	Signify Netherlands B.V.
0x0610	ADH GUARDIAN USA LLC
0x0611	Beurer GmbH
0x0612	Playfinity AS
0x0613	Hans Dinslage GmbH
0x0614	OnAsset Intelligence, Inc.
0x0615	INTER ACTION Corporation
0x0616	OS42 UG (haftungsbeschraenkt)
0x0617	WIZCONNECTED COMPANY LIMITED
0x0618	Audio-Technica Corporation
0x0619	Six Guys Labs, s.r.o.
0x061A	R.W. Beckett Corporation
0x061B	silex technology, inc.

0x061C	Univations Limited
0x061D	SENS Innovation ApS
0x061E	Diamond Kinetics, Inc.
0x061F	Phrame Inc.
0x0620	Forciot Oy
0x0621	Noordung d.o.o.
0x0622	Beam Labs, LLC
0x0623	Philadelphia Scientific (U.K.) Limited
0x0624	Biovotion AG
0x0625	Square Panda, Inc.
0x0626	Amplifico
0x0627	WEG S.A.
0x0628	Ensto Oy
0x0629	PHONEPE PVT LTD
0x062A	Lunatico Astronomia SL
0x062B	MinebeaMitsumi Inc.
0x062C	ASPion GmbH
0x062D	Vossloh-Schwabe Deutschland GmbH
0x062E	Procept
0x062F	ONKYO Corporation
0x0630	Asthrea D.O.O.
0x0631	Fortiori Design LLC
0x0632	Hugo Muller GmbH & Co KG
0x0633	Wangi Lai PLT
0x0634	Fanstel Corp
0x0635	Crookwood
0x0636	ELECTRONICA INTEGRAL DE SONIDO S.A.
0x0637	GiP Innovation Tools GmbH
0x0638	LX SOLUTIONS PTY LIMITED
0x0639	Shenzhen Minew Technologies Co., Ltd.
0x063A	Prolojik Limited
0x063B	Kromek Group Plc
0x063C	Contec Medical Systems Co., Ltd.
0x063D	Xradio Technology Co.,Ltd.
0x063E	The Indoor Lab, LLC
0x063F	LDL TECHNOLOGY

0x0640	Dish Network LLC
0x0641	Revenue Collection Systems FRANCE SAS
0x0642	Bluetrum Technology Co.,Ltd
0x0643	makita corporation
0x0644	Apogee Instruments
0x0645	BM3
0x0646	SGV Group Holding GmbH & Co. KG
0x0647	MED-EL
0x0648	Ultune Technologies
0x0649	Ryeex Technology Co.,Ltd.
0x064A	Open Research Institute, Inc.
0x064B	Scale-Tec, Ltd
0x064C	Zumtobel Group AG
0x064D	iLOQ Oy
0x064E	KRUXWorks Technologies Private Limited
0x064F	Digital Matter Pty Ltd
0x0650	Coravin, Inc.
0x0651	Stasis Labs, Inc.
0x0652	ITZ Innovations- und Technologiezentrum GmbH
0x0653	Meggitt SA
0x0654	Ledlenser GmbH & Co. KG
0x0655	Renishaw PLC
0x0656	ZhuHai AdvanPro Technology Company Limited
0x0657	Meshtronix Limited
0x0658	Payex Norge AS
0x0659	UnSeen Technologies Oy
0x065A	Zound Industries International AB
0x065B	Sesam Solutions BV
0x065C	PixArt Imaging Inc.
0x065D	Panduit Corp.
0x065E	Alo AB
0x065F	Ricoh Company Ltd
0x0660	RTC Industries, Inc.
0x0661	Mode Lighting Limited
0x0662	Particle Industries, Inc.
0x0663	Advanced Telemetry Systems, Inc.

0x0664	RHA TECHNOLOGIES LTD
0x0665	Pure International Limited
0x0666	WTO Werkzeug-Einrichtungen GmbH
0x0667	Spark Technology Labs Inc.
0x0668	Bleb Technology srl
0x0669	Livanova USA, Inc.
0x066A	Brady Worldwide Inc.
0x066B	DewertOkin GmbH
0x066C	Ztove ApS
0x066D	Venso EcoSolutions AB
0x066E	Eurotronik Kranj d.o.o.
0x066F	Hug Technology Ltd
0x0670	Gema Switzerland GmbH
0x0671	Buzz Products Ltd.
0x0672	Kopi
0x0673	Innova Ideas Limited
0x0674	BeSpoon
0x0675	Deco Enterprises, Inc.
0x0676	Expai Solutions Private Limited
0x0677	Innovation First, Inc.
0x0678	SABIK Offshore GmbH
0x0679	4iiii Innovations Inc.
0x067A	The Energy Conservatory, Inc.
0x067B	I.FARM, INC.
0x067C	Tile, Inc.
0x067D	Form Athletica Inc.
0x067E	MbientLab Inc
0x067F	NETGRID S.N.C. DI BISSOLI MATTEO, CAMPOREALE SIMONE, TOGNETTI FEDERICO
0x0680	Mannkind Corporation
0x0681	Trade FIDES a.s.
0x0682	Photron Limited
0x0683	Eltako GmbH
0x0684	Dermalapps, LLC
0x0685	Greenwald Industries
0x0686	inQs Co., Ltd.

0x0687	Cherry GmbH
0x0688	Amsted Digital Solutions Inc.
0x0689	Tacx b.v.
0x068A	Raytac Corporation
0x068B	Jiangsu Teranovo Tech Co., Ltd.
0x068C	Changzhou Sound Dragon Electronics and Acoustics Co., Ltd
0x068D	JetBeep Inc.
0x068E	Razer Inc.
0x068F	JRM Group Limited
0x0690	Eccrine Systems, Inc.
0x0691	Curie Point AB
0x0692	Georg Fischer AG
0x0693	Hach - Danaher
0x0694	T&A Laboratories LLC
0x0695	Koki Holdings Co., Ltd.
0x0696	Gunakar Private Limited
0x0697	Stemco Products Inc
0x0698	Wood IT Security, LLC
0x0699	RandomLab SAS
0x069A	Adero, Inc.
0x069B	Dragonchip Limited
0x069C	Noomi AB
0x069D	Vakaros LLC
0x069E	Delta Electronics, Inc.
0x069F	FlowMotion Technologies AS
0x06A0	OBIQ Location Technology Inc.
0x06A1	Cardo Systems, Ltd
0x06A2	Globalworx GmbH
0x06A3	Nymbus, LLC
0x06A4	LIMNO Co. Ltd.
0x06A5	TEKZITEL PTY LTD
0x06A6	Roambee Corporation
0x06A7	Chipsea Technologies (ShenZhen) Corp.
0x06A8	GD Midea Air-Conditioning Equipment Co., Ltd.
0x06A9	Soundmax Electronics Limited
0x06AA	Produal Oy

0x06AB	HMS Industrial Networks AB
0x06AC	Ingchips Technology Co., Ltd.
0x06AD	InnovaSea Systems Inc.
0x06AE	SenseQ Inc.
0x06AF	Shoof Technologies
0x06B0	BRK Brands, Inc.
0x06B1	SimpliSafe, Inc.
0x06B2	Tussock Innovation 2013 Limited
0x06B3	The Hablab ApS
0x06B4	Sencilion Oy
0x06B5	Wabilogic Ltd.
0x06B6	Sociometric Solutions, Inc.
0x06B7	iCOGNIZE GmbH
0x06B8	ShadeCraft, Inc
0x06B9	Beflex Inc.
0x06BA	Beaconzone Ltd
0x06BB	Leaftronix Analogic Solutions Private Limited
0x06BC	TWS Srl
0x06BD	ABB Oy
0x06BE	HitSeed Oy
0x06BF	Delcom Products Inc.
0x06C0	CAME S.p.A.
0x06C1	Alarm.com Holdings, Inc
0x06C2	Measurlogic Inc.
0x06C3	King I Electronics.Co.,Ltd
0x06C4	Dream Labs GmbH
0x06C5	Urban Compass, Inc
0x06C6	Simm Tronic Limited
0x06C7	Somatix Inc
0x06C8	Storz & Bickel GmbH & Co. KG
0x06C9	MYLAPS B.V.
0x06CA	Shenzhen Zhongguang Infotech Technology Development Co., Ltd
0x06CB	Dyeware, LLC
0x06CC	Dongguan SmartAction Technology Co.,Ltd.
0x06CD	DIG Corporation
0x06CE	FIOR & GENTZ

0x06CF	Belparts N.V.
0x06D0	Etekcity Corporation
0x06D1	Meyer Sound Laboratories, Incorporated
0x06D2	CeoTronics AG
0x06D3	TriTeq Lock and Security, LLC
0x06D4	DYNAKODE TECHNOLOGY PRIVATE LIMITED
0x06D5	Sensirion AG
0x06D6	JCT Healthcare Pty Ltd
0x06D7	FUBA Automotive Electronics GmbH
0x06D8	AW Company
0x06D9	Shanghai Mountain View Silicon Co.,Ltd.
0x06DA	Zliide Technologies ApS
0x06DB	Automatic Labs, Inc.
0x06DC	Industrial Network Controls, LLC
0x06DD	Intellithings Ltd.
0x06DE	Navcast, Inc.
0x06DF	HLI Solutions Inc.
0x06E0	Avaya Inc.
0x06E1	Milestone AV Technologies LLC
0x06E2	Alango Technologies Ltd
0x06E3	Spinlock Ltd
0x06E4	Aluna
0x06E5	OPTEX CO.,LTD.
0x06E6	NIHON DENGYO KOUSAKU
0x06E7	VELUX A/S
0x06E8	Almendo Technologies GmbH
0x06E9	Zmartfun Electronics, Inc.
0x06EA	SafeLine Sweden AB
0x06EB	Houston Radar LLC
0x06EC	Sigur
0x06ED	J Neades Ltd
0x06EE	Avantis Systems Limited
0x06EF	ALCARE Co., Ltd.
0x06F0	Chargy Technologies, SL
0x06F1	Shibutani Co., Ltd.
0x06F2	Trapper Data AB

0x06F3	Alfred International Inc.
0x06F4	Touché Technology Ltd
0x06F5	Vigil Technologies Inc.
0x06F6	Vitulo Plus BV
0x06F7	WILKA Schliesstechnik GmbH
0x06F8	BodyPlus Technology Co.,Ltd
0x06F9	happybrush GmbH
0x06FA	Enequi AB
0x06FB	Sartorius AG
0x06FC	Tom Communication Industrial Co.,Ltd.
0x06FD	ESS Embedded System Solutions Inc.
0x06FE	Mahr GmbH
0x06FF	Redpine Signals Inc
0x0700	TraqFreq LLC
0x0701	PAFERS TECH
0x0702	Akciju sabiedriba "SAF TEHNIKA"
0x0703	Beijing Jingdong Century Trading Co., Ltd.
0x0704	JBX Designs Inc.
0x0705	AB Electrolux
0x0706	Wernher von Braun Center for ASdvanced Research
0x0707	Essity Hygiene and Health Aktiebolag
0x0708	Be Interactive Co., Ltd
0x0709	Carewear Corp.
0x070A	Huf Hülsbeck & Fürst GmbH & Co. KG
0x070B	Element Products, Inc.
0x070C	Beijing Winner Microelectronics Co.,Ltd
0x070D	SmartSnugg Pty Ltd
0x070E	FiveCo Sarl
0x070F	California Things Inc.
0x0710	Audiodo AB
0x0711	ABAX AS
0x0712	Bull Group Company Limited
0x0713	Respiri Limited
0x0714	MindPeace Safety LLC
0x0715	MBARC LABS Inc
0x0716	Altonics

0x0717	iQsquare BV
0x0718	IDIBAIX enginneering
0x0719	COREIOT PTY LTD
0x071A	REVSMART WEARABLE HK CO LTD
0x071B	Precor
0x071C	F5 Sports, Inc
0x071D	exoTIC Systems
0x071E	DONGGUAN HELE ELECTRONICS CO., LTD
0x071F	Dongguan Liesheng Electronic Co.Ltd
0x0720	Oculeve, Inc.
0x0721	Clover Network, Inc.
0x0722	Xiamen Eholder Electronics Co.Ltd
0x0723	Ford Motor Company
0x0724	Guangzhou SuperSound Information Technology Co.,Ltd
0x0725	Tedee Sp. z o.o.
0x0726	PHC Corporation
0x0727	STALKIT AS
0x0728	Eli Lilly and Company
0x0729	SwaraLink Technologies
0x072A	JMR embedded systems GmbH
0x072B	Bitkey Inc.
0x072C	GWA Hygiene GmbH
0x072D	Safera Oy
0x072E	Open Platform Systems LLC
0x072F	OnePlus Electronics (Shenzhen) Co., Ltd.
0x0730	Wildlife Acoustics, Inc.
0x0731	ABLIC Inc.
0x0732	Dairy Tech, Inc.
0x0733	Iguanavation, Inc.
0x0734	DiUS Computing Pty Ltd
0x0735	UpRight Technologies LTD
0x0736	Luna XIO, Inc.
0x0737	LLC Navitek
0x0738	Glass Security Pte Ltd
0x0739	Jiangsu Qinheng Co., Ltd.
0x073A	Chandler Systems Inc.

0x073B	Fantini Cosmi s.p.a.
0x073C	Acubit ApS
0x073D	Beijing Hao Heng Tian Tech Co., Ltd.
0x073E	Bluepack S.R.L.
0x073F	Beijing Unisoc Technologies Co., Ltd.
0x0740	HITIQ LIMITED
0x0741	MAC SRL
0x0742	DML LLC
0x0743	Sanofi
0x0744	SOCOMEC
0x0745	WIZNOVA, Inc.
0x0746	Seitec Elektronik GmbH
0x0747	OR Technologies Pty Ltd
0x0748	GuangZhou KuGou Computer Technology Co.Ltd
0x0749	DIAODIAO (Beijing) Technology Co., Ltd.
0x074A	Illusory Studios LLC
0x074B	Sarvavid Software Solutions LLP
0x074C	iopool s.a.
0x074D	Amtech Systems, LLC
0x074E	EAGLE DETECTION SA
0x074F	MEDIATECH S.R.L.
0x0750	Hamilton Professional Services of Canada Incorporated
0x0751	Changsha JEMO IC Design Co.,Ltd
0x0752	Elatec GmbH
0x0753	JLG Industries, Inc.
0x0754	Michael Parkin
0x0755	Brother Industries, Ltd
0x0756	Lumens For Less, Inc
0x0757	ELA Innovation
0x0758	umanSense AB
0x0759	Shanghai InGeek Cyber Security Co., Ltd.
0x075A	HARMAN CO.,LTD.
0x075B	Smart Sensor Devices AB
0x075C	Antitronics Inc.
0x075D	RHOMBUS SYSTEMS, INC.
0x075E	Katerra Inc.

0x075F	Remote Solution Co., LTD.
0x0760	Vimar SpA
0x0761	Mantis Tech LLC
0x0762	TerOpta Ltd
0x0763	PIKOLIN S.L.
0x0764	WWZN Information Technology Company Limited
0x0765	Voxx International
0x0766	ART AND PROGRAM, INC.
0x0767	NITTO DENKO ASIA TECHNICAL CENTRE PTE. LTD.
0x0768	Peloton Interactive Inc.
0x0769	Force Impact Technologies
0x076A	Dmac Mobile Developments, LLC
0x076B	Engineered Medical Technologies
0x076C	Noodle Technology inc
0x076D	Graesslin GmbH
0x076E	WuQi technologies, Inc.
0x076F	Successful Endeavours Pty Ltd
0x0770	InnoCon Medical ApS
0x0771	Corvex Connected Safety
0x0772	Thirdwayv Inc.
0x0773	Echoflex Solutions Inc.
0x0774	C-MAX Asia Limited
0x0775	4eBusiness GmbH
0x0776	Cyber Transport Control GmbH
0x0777	Cue
0x0778	KOAMTAC INC.
0x0779	Loopshore Oy
0x077A	Niruha Systems Private Limited
0x077B	AmaterZ, Inc.
0x077C	radius co., ltd.
0x077D	Sensority, s.r.o.
0x077E	Sparkage Inc.
0x077F	Glenview Software Corporation
0x0780	Finch Technologies Ltd.
0x0781	Qingping Technology (Beijing) Co., Ltd.
0x0782	DeviceDrive AS

0x0783	ESEMBER LIMITED LIABILITY COMPANY
0x0784	audifon GmbH & Co. KG
0x0785	O2 Micro, Inc.
0x0786	HLP Controls Pty Limited
0x0787	Pangaea Solution
0x0788	BubblyNet, LLC
0x0789	PCB Piezotronics, Inc.
0x078A	The Wildflower Foundation
0x078B	Optikam Tech Inc.
0x078C	MINIBREW HOLDING B.V
0x078D	Cybex GmbH
0x078E	FUJIMIC NIIGATA, INC.
0x078F	Hanna Instruments, Inc.
0x0790	KOMPAN A/S
0x0791	Scosche Industries, Inc.
0x0792	Cricut, Inc.
0x0793	AEV spol. s r.o.
0x0794	The Coca-Cola Company
0x0795	GASTEC CORPORATION
0x0796	StarLeaf Ltd
0x0797	Water-i.d. GmbH
0x0798	HoloKit, Inc.
0x0799	PlantChoir Inc.
0x079A	GuangDong Oppo Mobile Telecommunications Corp., Ltd.
0x079B	CST ELECTRONICS (PROPRIETARY) LIMITED
0x079C	Sky UK Limited
0x079D	Digibale Pty Ltd
0x079E	Smartloxx GmbH
0x079F	Pune Scientific LLP
0x07A0	Regent Beleuchtungskorper AG
0x07A1	Apollo Neuroscience, Inc.
0x07A2	Roku, Inc.
0x07A3	Comcast Cable
0x07A4	Xiamen Mage Information Technology Co., Ltd.
0x07A5	RAB Lighting, Inc.
0x07A6	Musen Connect, Inc.

0x07A7	Zume, Inc.
0x07A8	conbee GmbH
0x07A9	Bruel & Kjaer Sound & Vibration
0x07AA	The Kroger Co.
0x07AB	Granite River Solutions, Inc.
0x07AC	LoupeDeck Oy
0x07AD	New H3C Technologies Co.,Ltd
0x07AE	Aurea Solucoes Tecnologicas Ltda.
0x07AF	Hong Kong Bouffalo Lab Limited
0x07B0	GV Concepts Inc.
0x07B1	Thomas Dynamics, LLC
0x07B2	Moeco IOT Inc.
0x07B3	2N TELEKOMUNIKACE a.s.
0x07B4	Hormann KG Antriebstechnik
0x07B5	CRONO CHIP, S.L.
0x07B6	Soundbrenner Limited
0x07B7	ETABLISSEMENTS GEORGES RENAULT
0x07B8	iSwip
0x07B9	Epona Biotec Limited
0x07BA	Battery-Biz Inc.
0x07BB	EPIC S.R.L.
0x07BC	KD CIRCUITS LLC
0x07BD	Genedrive Diagnostics Ltd
0x07BE	Axentia Technologies AB
0x07BF	REGULA Ltd.
0x07C0	Biral AG
0x07C1	A.W. Chesterton Company
0x07C2	Radinn AB
0x07C3	CIMTechniques, Inc.
0x07C4	Johnson Health Tech NA
0x07C5	June Life, Inc.
0x07C6	Bluenetics GmbH
0x07C7	iaconicDesign Inc.
0x07C8	WRLDS Creations AB
0x07C9	Skullcandy, Inc.
0x07CA	Modul-System HH AB

0x07CB	West Pharmaceutical Services, Inc.
0x07CC	Barnacle Systems Inc.
0x07CD	Smart Wave Technologies Canada Inc
0x07CE	Shanghai Top-Chip Microelectronics Tech. Co., LTD
0x07CF	NeoSensory, Inc.
0x07D0	Hangzhou Tuya Information Technology Co., Ltd
0x07D1	Shanghai Panchip Microelectronics Co., Ltd
0x07D2	React Accessibility Limited
0x07D3	LIVNEX Co.,Ltd.
0x07D4	Kano Computing Limited
0x07D5	hoots classic GmbH
0x07D6	ecobee Inc.
0x07D7	Nanjing Qinheng Microelectronics Co., Ltd
0x07D8	SOLUTIONS AMBRA INC.
0x07D9	Micro-Design, Inc.
0x07DA	STARLITE Co., Ltd.
0x07DB	Remedee Labs
0x07DC	ThingOS GmbH & Co KG
0x07DD	Linear Circuits
0x07DE	Unlimited Engineering SL
0x07DF	Snap-on Incorporated
0x07E0	Edifier International Limited
0x07E1	Lucie Labs
0x07E2	Alfred Kaercher SE & Co. KG
0x07E3	Airoha Technology Corp.
0x07E4	Geeksme S.L.
0x07E5	Minut, Inc.
0x07E6	Waybeyond Limited
0x07E7	Komfort IQ, Inc.
0x07E8	Packetcraft, Inc.
0x07E9	Häfele GmbH & Co KG
0x07EA	ShapeLog, Inc.
0x07EB	NOVABASE S.R.L.
0x07EC	Frecce LLC
0x07ED	Joule IQ, INC.
0x07EE	KidzTek LLC

0x07EF	Aktiebolaget Sandvik Coromant
0x07F0	e-moola.com Pty Ltd
0x07F1	Zimi Innovations Pty Ltd
0x07F2	SERENE GROUP, INC
0x07F3	DIGISINE ENERGYTECH CO. LTD.
0x07F4	MEDIRLAB Orvosbiologiai Fejleszto Korlatolt Felelossegu Tarsasag
0x07F5	Byton North America Corporation
0x07F6	Shenzhen TonliScience and Technology Development Co.,Ltd
0x07F7	Cesar Systems Ltd.
0x07F8	quip NYC Inc.
0x07F9	Direct Communication Solutions, Inc.
0x07FA	Klipsch Group, Inc.
0x07FB	Access Co., Ltd
0x07FC	Renault SA
0x07FD	JSK CO., LTD.
0x07FE	BIROTA
0x07FF	maxon motor ltd.
0x0800	Optek
0x0801	CRONUS ELECTRONICS LTD
0x0802	NantSound, Inc.
0x0803	Domintell s.a.
0x0804	Andon Health Co.,Ltd
0x0805	Urbanminded Ltd
0x0806	TYRI Sweden AB
0x0807	ECD Electronic Components GmbH Dresden
0x0808	SISTEMAS KERN, SOCIEDAD ANÓMINA
0x0809	Trulli Audio
0x080A	Altaneos
0x080B	Nanoleaf Canada Limited
0x080C	Ingy B.V.
0x080D	Azbil Co.
0x080E	TATTCOM LLC
0x080F	Paradox Engineering SA
0x0810	LECO Corporation
0x0811	Becker Antriebe GmbH
0x0812	Mstream Technologies., Inc.

0x0813	Flextronics International USA Inc.
0x0814	Ossur hf.
0x0815	SKC Inc
0x0816	SPICA SYSTEMS LLC
0x0817	Wangs Alliance Corporation
0x0818	tatwah SA
0x0819	Hunter Douglas Inc
0x081A	Shenzhen Conex
0x081B	DIM3
0x081C	Bobrick Washroom Equipment, Inc.
0x081D	Potrykus Holdings and Development LLC
0x081E	iNFORM Technology GmbH
0x081F	eSenseLab LTD
0x0820	Brilliant Home Technology, Inc.
0x0821	INOVA Geophysical, Inc.
0x0822	adafruit industries
0x0823	Nexite Ltd
0x0824	8Power Limited
0x0825	CME PTE. LTD.
0x0826	Hyundai Motor Company
0x0827	Kickmaker
0x0828	Shanghai Suisheng Information Technology Co., Ltd.
0x0829	HEXAGON METROLOGY DIVISION ROMER
0x082A	Mitutoyo Corporation
0x082B	shenzhen fitcare electronics Co.,Ltd
0x082C	INGICS TECHNOLOGY CO., LTD.
0x082D	INCUS PERFORMANCE LTD.
0x082E	ABB S.p.A.
0x082F	Blippit AB
0x0830	Core Health and Fitness LLC
0x0831	Foxble, LLC
0x0832	Intermotive,Inc.
0x0833	Conneqtech B.V.
0x0834	RIKEN KEIKI CO., LTD.,
0x0835	Canopy Growth Corporation
0x0836	Bitwards Oy

0x0837	vivo Mobile Communication Co., Ltd.
0x0838	Etymotic Research, Inc.
0x0839	A puissance 3
0x083A	BPW Bergische Achsen Kommanditgesellschaft
0x083B	Piaggio Fast Forward
0x083C	BeerTech LTD
0x083D	Tokenize, Inc.
0x083E	Zorachka LTD
0x083F	D-Link Corp.
0x0840	Down Range Systems LLC
0x0841	General Luminaire (Shanghai) Co., Ltd.
0x0842	Tangshan HongJia electronic technology co., LTD.
0x0843	FRAGRANCE DELIVERY TECHNOLOGIES LTD
0x0844	Pepperl + Fuchs GmbH
0x0845	Dometic Corporation
0x0846	USound GmbH
0x0847	DNANUDGE LIMITED
0x0848	JUJU JOINTS CANADA CORP.
0x0849	Dopple Technologies B.V.
0x084A	ARCOM
0x084B	Biotechware SRL
0x084C	ORSO Inc.
0x084D	SafePort
0x084E	Carol Cole Company
0x084F	Embedded Fitness B.V.
0x0850	Yealink (Xiamen) Network Technology Co.,LTD
0x0851	Subeca, Inc.
0x0852	Cognosos, Inc.
0x0853	Pektron Group Limited
0x0854	Tap Sound System
0x0855	Helios Sports, Inc.
0x0856	Canopy Growth Corporation
0x0857	Parsyl Inc
0x0858	SOUNDBOKS
0x0859	BlueUp
0x085A	DAKATECH

0x085B	Nisshinbo Micro Devices Inc.
0x085C	ACOS CO.,LTD.
0x085D	Guilin Zhishen Information Technology Co.,Ltd.
0x085E	Krog Systems LLC
0x085F	COMPEGPS TEAM,SOCIEDAD LIMITADA
0x0860	Alflex Products B.V.
0x0861	SmartSensor Labs Ltd
0x0862	SmartDrive
0x0863	Yo-tronics Technology Co., Ltd.
0x0864	Rafaelmicro
0x0865	Emergency Lighting Products Limited
0x0866	LAONZ Co.,Ltd
0x0867	Western Digital Techologies, Inc.
0x0868	WIOsense GmbH & Co. KG
0x0869	EVVA Sicherheitstechnologie GmbH
0x086A	Odic Incorporated
0x086B	Pacific Track, LLC
0x086C	Revvo Technologies, Inc.
0x086D	Biometrika d.o.o.
0x086E	Vorwerk Elektrowerke GmbH & Co. KG
0x086F	Trackunit A/S
0x0870	Wyze Labs, Inc
0x0871	Dension Elektronikai Kft.
0x0872	11 Health & Technologies Limited
0x0873	Innophase Incorporated
0x0874	Treegreen Limited
0x0875	Berner International LLC
0x0876	SmartResQ ApS
0x0877	Tome, Inc.
0x0878	The Chamberlain Group, Inc.
0x0879	MIZUNO Corporation
0x087A	ZRF, LLC
0x087B	BYSTAMP
0x087C	Crosscan GmbH
0x087D	Konftel AB
0x087E	1bar.net Limited

0x087F	Phillips Connect Technologies LLC
0x0880	imagiLabs AB
0x0881	Optalert
0x0882	PSYONIC, Inc.
0x0883	Wintersteiger AG
0x0884	Controlid Industria, Comercio de Hardware e Servicos de Tecnologia Ltda
0x0885	LEVOLOR INC
0x0886	Movella Technologies B.V.
0x0887	Hydro-Gear Limited Partnership
0x0888	EnPointe Fencing Pty Ltd
0x0889	XANTHIO
0x088A	sclak s.r.l.
0x088B	Tricorder Arraay Technologies LLC
0x088C	GB Solution co.,Ltd
0x088D	Soliton Systems K.K.
0x088E	GIGA-TMS INC
0x088F	Tait International Limited
0x0890	NICHIEI INTEC CO., LTD.
0x0891	SmartWireless GmbH & Co. KG
0x0892	Ingenieurbuero Birnfeld UG (haftungsbeschraenkt)
0x0893	Maytronics Ltd
0x0894	EPIFIT
0x0895	Gimer medical
0x0896	Nokian Renkaat Oyj
0x0897	Current Lighting Solutions LLC
0x0898	Sensibo, Inc.
0x0899	SFS unimarket AG
0x089A	Private limited company "Teltonika"
0x089B	Saucon Technologies
0x089C	Embedded Devices Co. Company
0x089D	J-J.A.D.E. Enterprise LLC
0x089E	i-SENS, inc.
0x089F	Witschi Electronic Ltd
0x08A0	Aclara Technologies LLC
0x08A1	EXEO TECH CORPORATION
0x08A2	Epic Systems Co., Ltd.

0x08A3	Hoffmann SE
0x08A4	Realme Chongqing Mobile Telecommunications Corp., Ltd.
0x08A5	UMEHEAL Ltd
0x08A6	Intelligenceworks Inc.
0x08A7	TGR 1.618 Limited
0x08A8	Shanghai Kfcube Inc
0x08A9	Fraunhofer IIS
0x08AA	SZ DJI TECHNOLOGY CO.,LTD
0x08AB	Coburn Technology, LLC
0x08AC	Topre Corporation
0x08AD	Kayamatics Limited
0x08AE	Moticon ReGo AG
0x08AF	Polidea Sp. z o.o.
0x08B0	Trivedi Advanced Technologies LLC
0x08B1	CORE|vision BV
0x08B2	PF SCHWEISSTECHNOLOGIE GMBH
0x08B3	IONIQ Skincare GmbH & Co. KG
0x08B4	Sengled Co., Ltd.
0x08B5	TransferFi
0x08B6	Boehringer Ingelheim Vetmedica GmbH
0x08B7	ABB Inc
0x08B8	Check Technology Solutions LLC
0x08B9	U-Shin Ltd.
0x08BA	HYPER ICE, INC.
0x08BB	Tokai-rika co.,ltd.
0x08BC	Prevayl Limited
0x08BD	bf1systems limited
0x08BE	ubisys technologies GmbH
0x08BF	SIRC Co., Ltd.
0x08C0	Accent Advanced Systems SLU
0x08C1	Rayden.Earth LTD
0x08C2	Lindinvent AB
0x08C3	CHIPOLO d.o.o.
0x08C4	CellAssist, LLC
0x08C5	J. Wagner GmbH
0x08C6	Integra Optics Inc

0x08C7	Monadnock Systems Ltd.
0x08C8	Liteboxer Technologies Inc.
0x08C9	Noventa AG
0x08CA	Nubia Technology Co.,Ltd.
0x08CB	JT INNOVATIONS LIMITED
0x08CC	TGM TECHNOLOGY CO., LTD.
0x08CD	ifly
0x08CE	ZIMI CORPORATION
0x08CF	betternotstealmybike UG (with limited liability)
0x08D0	ESTOM Infotech Kft.
0x08D1	Sensovium Inc.
0x08D2	Virscient Limited
0x08D3	Novel Bits, LLC
0x08D4	ADATA Technology Co., LTD.
0x08D5	KEYes
0x08D6	Nome Oy
0x08D7	Inovonics Corp
0x08D8	WARES
0x08D9	Pointr Labs Limited
0x08DA	Miridia Technology Incorporated
0x08DB	Tertium Technology
0x08DC	SHENZHEN AUKEY E BUSINESS CO., LTD
0x08DD	code-Q
0x08DE	TE Connectivity Corporation
0x08DF	IRIS OHYAMA CO.,LTD.
0x08E0	Philia Technology
0x08E1	KOZO KEIKAKU ENGINEERING Inc.
0x08E2	Shenzhen Simo Technology co. LTD
0x08E3	Republic Wireless, Inc.
0x08E4	Rashidov ltd
0x08E5	Crowd Connected Ltd
0x08E6	Eneso Tecnologia de Adaptacion S.L.
0x08E7	Barrot Technology Co.,Ltd.
0x08E8	Naonext
0x08E9	Taiwan Intelligent Home Corp.
0x08EA	COWBELL ENGINEERING CO.,LTD.

0x08EB	Beijing Big Moment Technology Co., Ltd.
0x08EC	Denso Corporation
0x08ED	IMI Hydronic Engineering International SA
0x08EE	Askey Computer Corp.
0x08EF	Cumulus Digital Systems, Inc
0x08F0	Joovv, Inc.
0x08F1	The L.S. Starrett Company
0x08F2	Microoled
0x08F3	PSP - Pauli Services & Products GmbH
0x08F4	Kodimo Technologies Company Limited
0x08F5	Tymtix Technologies Private Limited
0x08F6	Dermal Photonics Corporation
0x08F7	MTD Products Inc & Affiliates
0x08F8	instagrid GmbH
0x08F9	Spacelabs Medical Inc.
0x08FA	Troo Corporation
0x08FB	Darkglass Electronics Oy
0x08FC	Hill-Rom
0x08FD	BioIntelliSense, Inc.
0x08FE	Ketronixs Sdn Bhd
0x08FF	Plastimold Products, Inc
0x0900	Beijing Zizai Technology Co., LTD.
0x0901	Lucimed
0x0902	TSC Auto-ID Technology Co., Ltd.
0x0903	DATAMARS, Inc.
0x0904	SUNCORPORATION
0x0905	Yandex Services AG
0x0906	Scope Logistical Solutions
0x0907	User Hello, LLC
0x0908	Pinpoint Innovations Limited
0x0909	70mai Co.,Ltd.
0x090A	Zhuhai Hoksi Technology CO.,LTD
0x090B	EMBR labs, INC
0x090C	Radiawave Technologies Co.,Ltd.
0x090D	IOT Invent GmbH
0x090E	OPTIMUSIOT TECH LLP

0x090F	VC Inc.
0x0910	ASR Microelectronics (Shanghai) Co., Ltd.
0x0911	Douglas Lighting Controls Inc.
0x0912	Nerbio Medical Software Platforms Inc
0x0913	Braveheart Wireless, Inc.
0x0914	INEO-SENSE
0x0915	Honda Motor Co., Ltd.
0x0916	Ambient Sensors LLC
0x0917	ASR Microelectronics(ShenZhen)Co., Ltd.
0x0918	Technosphere Labs Pvt. Ltd.
0x0919	NO SMD LIMITED
0x091A	Albertronic BV
0x091B	Luminostics, Inc.
0x091C	Oblamatik AG
0x091D	Innokind, Inc.
0x091E	Melbot Studios, Sociedad Limitada
0x091F	Myzee Technology
0x0920	Omnisense Limited
0x0921	KAHA PTE. LTD.
0x0922	Shanghai MXCHIP Information Technology Co., Ltd.
0x0923	JSB TECH PTE LTD
0x0924	Fundacion Tecnalia Research and Innovation
0x0925	Yukai Engineering Inc.
0x0926	Gooligum Technologies Pty Ltd
0x0927	ROOQ GmbH
0x0928	AiRISTA
0x0929	Qingdao Haier Technology Co., Ltd.
0x092A	Sappl Verwaltungs- und Betriebs GmbH
0x092B	TekHome
0x092C	PCI Private Limited
0x092D	Leggett & Platt, Incorporated
0x092E	PS GmbH
0x092F	C.O.B.O. SpA
0x0930	James Walker RotaBolt Limited
0x0931	BREATHINGS Co., Ltd.
0x0932	BarVision, LLC

0x0933	SRAM
0x0934	KiteSpring Inc.
0x0935	Reconnect, Inc.
0x0936	Elekon AG
0x0937	RealThingks GmbH
0x0938	Henway Technologies, LTD.
0x0939	ASTEM Co.,Ltd.
0x093A	LinkedSemi Microelectronics (Xiamen) Co., Ltd
0x093B	ENSESO LLC
0x093C	Xenoma Inc.
0x093D	Adolf Wuerth GmbH & Co KG
0x093E	Catalyft Labs, Inc.
0x093F	JEPICO Corporation
0x0940	Hero Workout GmbH
0x0941	Rivian Automotive, LLC
0x0942	TRANSSION HOLDINGS LIMITED
0x0944	Agitron d.o.o.
0x0945	Globe (Jiangsu) Co., Ltd
0x0946	AMC International Alfa Metalcraft Corporation AG
0x0947	First Light Technologies Ltd.
0x0948	Wearable Link Limited
0x0949	Metronom Health Europe
0x094A	Zwift, Inc.
0x094B	Kindeva Drug Delivery L.P.
0x094C	GimmiSys GmbH
0x094D	tkLABS INC.
0x094E	PassiveBolt, Inc.
0x094F	Limited Liability Company "Mikrotikls"
0x0950	Capetech
0x0951	PPRS
0x0952	Apptricity Corporation
0x0953	LogiLube, LLC
0x0954	Julbo
0x0955	Breville Group
0x0956	Kerlink
0x0957	Ohsung Electronics

0x0958	ZTE Corporation
0x0959	HerdDogg, Inc
0x095A	Selekt Bilgisayar, Iletisim Urunleri Insaat Sanayi ve Ticaret Limited Sirketi
0x095B	Lismore Instruments Limited
0x095C	LogiLube, LLC
0x095D	Electronic Theatre Controls
0x095E	BioEchoNet inc.
0x095F	NUANCE HEARING LTD
0x0960	Sena Technologies Inc.
0x0961	Linkura AB
0x0962	GL Solutions K.K.
0x0963	Moonbird BV
0x0964	Countrymate Technology Limited
0x0965	Asahi Kasei Corporation
0x0966	PointGuard, LLC
0x0967	Neo Materials and Consulting Inc.
0x0968	Actev Motors, Inc.
0x0969	Woan Technology (Shenzhen) Co., Ltd.
0x096A	dricos, Inc.
0x096B	Guide ID B.V.
0x096C	9374-7319 Quebec inc
0x096D	Gunwerks, LLC
0x096E	Band Industries, inc.
0x096F	Lund Motion Products, Inc.
0x0970	IBA Dosimetry GmbH
0x0971	GA
0x0972	Closed Joint Stock Company "Zavod Flometr" ("Zavod Flometr" CJSC)
0x0973	Popit Oy
0x0974	ABEYE
0x0975	BlueIOT(Beijing) Technology Co.,Ltd
0x0976	Fauna Audio GmbH
0x0977	TOYOTA motor corporation
0x0978	ZifferEins GmbH & Co. KG
0x0979	BIOTRONIK SE & Co. KG
0x097A	CORE CORPORATION
0x097B	CTEK Sweden AB

0x097C	Thorley Industries, LLC
0x097D	CLB B.V.
0x097E	SonicSensory Inc
0x097F	ISEMAR S.R.L.
0x0980	DEKRA TESTING AND CERTIFICATION, S.A.U.
0x0981	Bernard Krone Holding SE & Co.KG
0x0982	ELPRO-BUCHS AG
0x0983	Feedback Sports LLC
0x0984	TeraTron GmbH
0x0985	Lumos Health Inc.
0x0986	Cello Hill, LLC
0x0987	TSE BRAKES, INC.
0x0988	BHM-Tech Produktionsgesellschaft m.b.H
0x0989	WIKA Alexander Wiegand SE & Co.KG
0x098A	Biovigil
0x098B	Mequonic Engineering, S.L.
0x098C	bGrid B.V.
0x098D	C3-WIRELESS, LLC
0x098E	ADVEEZ
0x098F	Aktiebolaget Regin
0x0990	Anton Paar GmbH
0x0991	Telenor ASA
0x0992	Big Kaiser Precision Tooling Ltd
0x0993	Absolute Audio Labs B.V.
0x0994	VT42 Pty Ltd
0x0995	Bronkhorst High-Tech B.V.
0x0996	C. & E. Fein GmbH
0x0997	NextMind
0x0998	Pixie Dust Technologies, Inc.
0x0999	eTactica ehf
0x099A	New Audio LLC
0x099B	Sendum Wireless Corporation
0x099C	deister electronic GmbH
0x099D	YKK AP Inc.
0x099E	Step One Limited
0x099F	Koya Medical, Inc.

0x09A0	Proof Diagnostics, Inc.
0x09A1	VOS Systems, LLC
0x09A2	ENGAGENOW DATA SCIENCES PRIVATE LIMITED
0x09A3	ARDUINO SA
0x09A4	KUMHO ELECTRICS, INC
0x09A5	Security Enhancement Systems, LLC
0x09A6	BEIJING ELECTRIC VEHICLE CO.,LTD
0x09A7	Paybuddy ApS
0x09A8	KHN Solutions LLC
0x09A9	Nippon Ceramic Co.,Ltd.
0x09AA	PHOTODYNAMIC INCORPORATED
0x09AB	DashLogic, Inc.
0x09AC	Ambiq
0x09AD	Narhwall Inc.
0x09AE	Pozyx NV
0x09AF	ifLink Open Community
0x09B0	Deublin Company, LLC
0x09B1	BLINQY
0x09B2	DYPHI
0x09B3	BlueX Microelectronics Corp Ltd.
0x09B4	PentaLock Aps.
0x09B5	AUTEC Gesellschaft fuer Automationstechnik mbH
0x09B6	Pegasus Technologies, Inc.
0x09B7	Bout Labs, LLC
0x09B8	PlayerData Limited
0x09B9	SAVOY ELECTRONIC LIGHTING
0x09BA	Elimo Engineering Ltd
0x09BB	SkyStream Corporation
0x09BC	Aerosens LLC
0x09BD	Centre Suisse d'Electronique et de Microtechnique SA
0x09BE	Vessel Ltd.
0x09BF	Span.IO, Inc.
0x09C0	AnotherBrain inc.
0x09C1	Rosewill
0x09C2	Universal Audio, Inc.
0x09C3	JAPAN TOBACCO INC.

0x09C4	UVISIO
0x09C5	HungYi Microelectronics Co.,Ltd.
0x09C6	Honor Device Co., Ltd.
0x09C7	Combustion, LLC
0x09C8	XUNTONG
0x09C9	CrowdGlow Ltd
0x09CA	Mobitrace
0x09CB	Hx Engineering, LLC
0x09CC	Senso4s d.o.o.
0x09CD	Blyott
0x09CE	Julius Blum GmbH
0x09CF	BlueStreak IoT, LLC
0x09D0	Chess Wise B.V.
0x09D1	ABLEPAY TECHNOLOGIES AS
0x09D2	Temperature Sensitive Solutions Systems Sweden AB
0x09D3	HeartHero, inc.
0x09D4	ORBIS Inc.
0x09D5	GEAR RADIO ELECTRONICS CORP.
0x09D6	EAR TEKNIK ISITME VE ODIOMETRI CIHAZLARI SANAYI VE TICARET ANONIM SIRKETI
0x09D7	Coyotta
0x09D8	Synergy Tecnologia em Sistemas Ltda
0x09D9	VivoSensMedical GmbH
0x09DA	Nagravision SA
0x09DB	Bionic Avionics Inc.
0x09DC	AON2 Ltd.
0x09DD	Innoware Development AB
0x09DE	JLD Technology Solutions, LLC
0x09DF	Magnus Technology Sdn Bhd
0x09E0	Preddio Technologies Inc.
0x09E1	Tag-N-Trac Inc
0x09E2	Wuhan Linptech Co.,Ltd.
0x09E3	Friday Home Aps
0x09E4	CPS AS
0x09E5	Mobilogix
0x09E6	Masonite Corporation

0x09E7	Kabushikigaisha HANERON
0x09E8	Melange Systems Pvt. Ltd.
0x09E9	LumenRadio AB
0x09EA	Athlos Oy
0x09EB	KEAN ELECTRONICS PTY LTD
0x09EC	Yukon advanced optics worldwide, UAB
0x09ED	Sibel Inc.
0x09EE	OJMAR SA
0x09EF	Steinel Solutions AG
0x09F0	WatchGas B.V.
0x09F1	OM Digital Solutions Corporation
0x09F2	Audeara Pty Ltd
0x09F3	Beijing Zero Zero Infinity Technology Co.,Ltd.
0x09F4	Spectrum Technologies, Inc.
0x09F5	OKI Electric Industry Co., Ltd
0x09F6	Mobile Action Technology Inc.
0x09F7	SENSATEC Co., Ltd.
0x09F8	R.O. S.R.L.
0x09F9	Hangzhou Yaguan Technology Co. LTD
0x09FA	Listen Technologies Corporation
0x09FB	TOITU CO., LTD.
0x09FC	Confidex
0x09FD	Keep Technologies, Inc.
0x09FE	Lichtvision Engineering GmbH
0x09FF	AIRSTAR
0x0A00	Ampler Bikes OU
0x0A01	Cleveron AS
0x0A02	Ayxon-Dynamics GmbH
0x0A03	donutrobotics Co., Ltd.
0x0A04	Flosonics Medical
0x0A05	Southwire Company, LLC
0x0A06	Shanghai wuqi microelectronics Co.,Ltd
0x0A07	Reflow Pty Ltd
0x0A08	Oras Oy
0x0A09	ECCT
0x0A0A	Volan Technology Inc.

0x0A0B	SIANA Systems
0x0A0C	Shanghai Yidian Intelligent Technology Co., Ltd.
0x0A0D	Blue Peacock GmbH
0x0A0E	Roland Corporation
0x0A0F	LIXIL Corporation
0x0A10	SUBARU Corporation
0x0A11	Sensolus
0x0A12	Dyson Technology Limited
0x0A13	Tec4med LifeScience GmbH
0x0A14	CROXEL, INC.
0x0A15	Syng Inc
0x0A16	RIDE VISION LTD
0x0A17	Plume Design Inc
0x0A18	Cambridge Animal Technologies Ltd
0x0A19	Maxell, Ltd.
0x0A1A	Link Labs, Inc.
0x0A1B	Embrava Pty Ltd
0x0A1C	INPEAK S.C.
0x0A1D	API-K
0x0A1E	CombiQ AB
0x0A1F	DeVilbiss Healthcare LLC
0x0A20	Jiangxi Innotech Technology Co., Ltd
0x0A21	Apollogic Sp. z o.o.
0x0A22	DAIICHIKOSHO CO., LTD.
0x0A23	BIXOLON CO.,LTD
0x0A24	Atmosic Technologies, Inc.
0x0A25	Eran Financial Services LLC
0x0A26	Louis Vuitton
0x0A27	AYU DEVICES PRIVATE LIMITED
0x0A28	NanoFlex Power Corporation
0x0A29	Worthcloud Technology Co.,Ltd
0x0A2A	Yamaha Corporation
0x0A2B	PaceBait IVS
0x0A2C	Shenzhen H&T Intelligent Control Co., Ltd
0x0A2D	Shenzhen Feasycom Technology Co., Ltd.
0x0A2E	Zuma Array Limited

0x0A2F	Instamic, Inc.
0x0A30	Air-Weigh
0x0A31	Nevro Corp.
0x0A32	Pinnacle Technology, Inc.
0x0A33	WMF AG
0x0A34	Luxer Corporation
0x0A35	safectory GmbH
0x0A36	NGK SPARK PLUG CO., LTD.
0x0A37	2587702 Ontario Inc.
0x0A38	Bouffalo Lab (Nanjing)., Ltd.
0x0A39	BLUETICKETING SRL
0x0A3A	Incotex Co. Ltd.
0x0A3B	Galileo Technology Limited
0x0A3C	Siteco GmbH
0x0A3D	DELABIE
0x0A3E	Hefei Yunlian Semiconductor Co., Ltd
0x0A3F	Shenzhen Yopeak Optoelectronics Technology Co., Ltd.
0x0A40	GEWISS S.p.A.
0x0A41	OPEX Corporation
0x0A42	Motionalysis, Inc.
0x0A43	Busch Systems International Inc.
0x0A44	Novidan, Inc.
0x0A45	3SI Security Systems, Inc
0x0A46	Beijing HC-Infinite Technology Limited
0x0A47	The Wand Company Ltd
0x0A48	JRC Mobility Inc.
0x0A49	Venture Research Inc.
0x0A4A	Map Large, Inc.
0x0A4B	MistyWest Energy and Transport Ltd.
0x0A4C	SiFli Technologies (shanghai) Inc.
0x0A4D	Lockn Technologies Private Limited
0x0A4E	Toytec Corporation
0x0A4F	VANMOOF Global Holding B.V.
0x0A50	Nextscape Inc.
0x0A51	CSIRO
0x0A52	Follow Sense Europe B.V.

0x0A53	KKM COMPANY LIMITED
0x0A54	SQL Technologies Corp.
0x0A55	Inugo Systems Limited
0x0A56	ambie
0x0A57	Meizhou Guo Wei Electronics Co., Ltd
0x0A58	Indigo Diabetes
0x0A59	TourBuilt, LLC
0x0A5A	Sontheim Industrie Elektronik GmbH
0x0A5B	LEGIC Identsystems AG
0x0A5C	Innovative Design Labs Inc.
0x0A5D	MG Energy Systems B.V.
0x0A5E	LaceClips llc
0x0A5F	stryker
0x0A60	DATANG SEMICONDUCTOR TECHNOLOGY CO.,LTD
0x0A61	Smart Parks B.V.
0x0A62	MOKO TECHNOLOGY Ltd
0x0A63	Gremsy JSC
0x0A64	Geopal system A/S
0x0A65	Lytx, INC.
0x0A66	JUSTMORPH PTE. LTD.
0x0A67	Beijing SuperHexa Century Technology CO. Ltd
0x0A68	Focus Ingenieria SRL
0x0A69	HAPPIEST BABY, INC.
0x0A6A	Scribble Design Inc.
0x0A6B	Olympic Ophthalmics, Inc.
0x0A6C	Pokkels
0x0A6D	KUUKANJYOKIN Co.,Ltd.
0x0A6E	Pac Sane Limited
0x0A6F	Warner Bros.
0x0A70	Ooma
0x0A71	Senquip Pty Ltd
0x0A72	Jumo GmbH & Co. KG
0x0A73	Innohome Oy
0x0A74	MICROSON S.A.
0x0A75	Delta Cycle Corporation
0x0A76	Synaptics Incorporated

0x0A77	AXTRO PTE. LTD.
0x0A78	Shenzhen Sunricher Technology Limited
0x0A79	Webasto SE
0x0A7A	Emlid Limited
0x0A7B	UniqAir Oy
0x0A7C	WAFERLOCK
0x0A7D	Freedman Electronics Pty Ltd
0x0A7E	KEBA Handover Automation GmbH
0x0A7F	Intuity Medical
0x0A80	Cleer Limited
0x0A81	Universal Biosensors Pty Ltd
0x0A82	Corsair
0x0A83	Rivata, Inc.
0x0A84	Greennote Inc,
0x0A85	Snowball Technology Co., Ltd.
0x0A86	ALIZENT International
0x0A87	Shanghai Smart System Technology Co., Ltd
0x0A88	PSA Peugeot Citroen
0x0A89	SES-Imagotag
0x0A8A	HAINBUCH GMBH SPANNENDE TECHNIK
0x0A8B	SANlight GmbH
0x0A8C	DelpSys, s.r.o.
0x0A8D	JCM TECHNOLOGIES S.A.
0x0A8E	Perfect Company
0x0A8F	TOTO LTD.
0x0A90	Shenzhen Grandsun Electronic Co.,Ltd.
0x0A91	Monarch International Inc.
0x0A92	Carestream Dental LLC
0x0A93	GiPStech S.r.l.
0x0A94	OOBIK Inc.
0x0A95	Pamex Inc.
0x0A96	Lightricity Ltd
0x0A97	SensTek
0x0A98	Foil, Inc.
0x0A99	Shanghai high-flying electronics technology Co.,Ltd
0x0A9A	TEMKIN ASSOCIATES, LLC

0x0A9B	Eello LLC
0x0A9C	Xi'an Fengyu Information Technology Co., Ltd.
0x0A9D	Canon Finetech Nisca Inc.
0x0A9E	LifePlus, Inc.
0x0A9F	ista International GmbH
0x0AA0	Loy Tec electronics GmbH
0x0AA1	LINCOGN TECHNOLOGY CO. LIMITED
0x0AA2	Care Bloom, LLC
0x0AA3	DIC Corporation
0x0AA4	FAZEPRO LLC
0x0AA5	Shenzhen Uascent Technology Co., Ltd
0x0AA6	Realityworks, inc.
0x0AA7	Urbanista AB
0x0AA8	Zencontrol Pty Ltd
0x0AA9	Spintly, Inc.
0x0AAA	Computime International Ltd
0x0AAB	Anhui Listenai Co
0x0AAC	OSM HK Limited
0x0AAD	Adevo Consulting AB
0x0AAE	PS Engineering, Inc.
0x0AAF	AIAIAI ApS
0x0AB0	Visiontronic s.r.o.
0x0AB1	InVue Security Products Inc
0x0AB2	TouchTronics, Inc.
0x0AB3	INNER RANGE PTY. LTD.
0x0AB4	Ellenby Technologies, Inc.
0x0AB5	Elstat Electronics Ltd.
0x0AB6	Xenter, Inc.
0x0AB7	LogTag North America Inc.
0x0AB8	Sens.ai Incorporated
0x0AB9	STL
0x0ABA	Open Bionics Ltd.
0x0ABB	R-DAS, s.r.o.
0x0ABC	KCCS Mobile Engineering Co., Ltd.
0x0ABD	Inventas AS
0x0ABE	Robkoo Information & Technologies Co., Ltd.

0x0ABF	PAUL HARTMANN AG
0x0AC0	Omni-ID USA, INC.
0x0AC1	Shenzhen Jingxun Technology Co., Ltd.
0x0AC2	RealMega Microelectronics technology (Shanghai) Co. Ltd.
0x0AC3	Kenzen, Inc.
0x0AC4	CODIUM
0x0AC5	Flexoptix GmbH
0x0AC6	Barnes Group Inc.
0x0AC7	Chengdu Aich Technology Co.,Ltd
0x0AC8	Keepin Co., Ltd.
0x0AC9	Swedlock AB
0x0ACA	Shenzhen CoolKit Technology Co., Ltd
0x0ACB	ise Individuelle Software und Elektronik GmbH
0x0ACC	Nuvoton
0x0ACD	Visuallex Sport International Limited
0x0ACE	KOBATA GAUGE MFG. CO., LTD.
0x0ACF	CACI Technologies
0x0AD0	Nordic Strong ApS
0x0AD1	EAGLE KINGDOM TECHNOLOGIES LIMITED
0x0AD2	Lautsprecher Teufel GmbH
0x0AD3	SSV Software Systems GmbH
0x0AD4	Zhuhai Pantum Electronisc Co., Ltd
0x0AD5	Streamit B.V.
0x0AD6	nymea GmbH
0x0AD7	AL-KO Geraete GmbH
0x0AD8	Franz Kaldewei GmbH&Co KG
0x0AD9	Shenzhen Aimore. Co.,Ltd
0x0ADA	Codefabrik GmbH
0x0ADB	Reelables, Inc.
0x0ADC	Duravit AG
0x0ADD	Boss Audio
0x0ADE	Vocera Communications, Inc.
0x0ADF	Douglas Dynamics L.L.C.
0x0AE0	Viceroy Devices Corporation
0x0AE1	ChengDu ForThink Technology Co., Ltd.
0x0AE2	IMATRIX SYSTEMS, INC.

0x0AE3	GlobalMed
0x0AE4	DALI Alliance
0x0AE5	unu GmbH
0x0AE6	Hexology
0x0AE7	Sunplus Technology Co., Ltd.
0x0AE8	LEVEL, s.r.o.
0x0AE9	FLIR Systems AB
0x0AEA	Borda Technology
0x0AEB	Square, Inc.
0x0AEC	FUTEK ADVANCED SENSOR TECHNOLOGY, INC
0x0AED	Saxonar GmbH
0x0AEE	Velentium, LLC
0x0AEF	GLP German Light Products GmbH
0x0AF0	Leupold & Stevens, Inc.
0x0AF1	CRADERS,CO.,LTD
0x0AF2	Shanghai All Link Microelectronics Co.,Ltd
0x0AF3	701x Inc.
0x0AF4	Radioworks Microelectronics PTY LTD
0x0AF5	Unitech Electronic Inc.
0x0AF6	AMETEK, Inc.
0x0AF7	Irdeto
0x0AF8	First Design System Inc.
0x0AF9	Unisto AG
0x0AFA	Chengdu Ambit Technology Co., Ltd.
0x0AFB	SMT ELEKTRONIK GmbH
0x0AFC	Cerebrum Sensor Technologies Inc.
0x0AFD	Weber Sensors, LLC
0x0AFE	Earda Technologies Co.,Ltd
0x0AFF	FUSEAWARE LIMITED
0x0B00	Flaircomm Microelectronics Inc.
0x0B01	RESIDEO TECHNOLOGIES, INC.
0x0B02	IORA Technology Development Ltd. Sti.
0x0B03	Precision Triathlon Systems Limited
0x0B04	I-PERCUT
0x0B05	Marquardt GmbH
0x0B06	FAZUA GmbH

0x0B07	Workaround Gmbh
0x0B08	Shenzhen Qianfenyi Intelligent Technology Co., LTD
0x0B09	soonisys
0x0B0A	Belun Technology Company Limited
0x0B0B	Sanistaal A/S
0x0B0C	BluPeak
0x0B0D	SANYO DENKO Co.,Ltd.
0x0B0E	Honda Lock Mfg. Co.,Ltd.
0x0B0F	B.E.A. S.A.
0x0B10	Alfa Laval Corporate AB
0x0B11	ThermoWorks, Inc.
0x0B12	ToughBuilt Industries LLC
0x0B13	IOTOOLS
0x0B14	Olumee
0x0B15	NAOS JAPAN K.K.
0x0B16	Guard RFID Solutions Inc.
0x0B17	SIG SAUER, INC.
0x0B18	DECATHLON SE
0x0B19	WBS PROJECT H PTY LTD
0x0B1A	Roca Sanitario, S.A.
0x0B1B	Enerpac Tool Group Corp.
0x0B1C	Nanoleq AG
0x0B1D	Accelerated Systems
0x0B1E	PB INC.
0x0B1F	Beijing ESWIN Computing Technology Co., Ltd.
0x0B20	TKH Security B.V.
0x0B21	ams AG
0x0B22	Hygiene IQ, LLC.
0x0B23	iRhythm Technologies, Inc.
0x0B24	BeiJing ZiJie TiaoDong KeJi Co.,Ltd.
0x0B25	NIBROTECH LTD
0x0B26	Baracoda Daily Healthtech.
0x0B27	Lumi United Technology Co., Ltd
0x0B28	CHACON
0x0B29	Tech-Venom Entertainment Private Limited
0x0B2A	ACL Airshop B.V.

0x0B2B	MAINBOT
0x0B2C	ILLUMAGEAR, Inc.
0x0B2D	REDARC ELECTRONICS PTY LTD
0x0B2E	MOCA System Inc.
0x0B2F	Duke Manufacturing Co
0x0B30	ART SPA
0x0B31	Silver Wolf Vehicles Inc.
0x0B32	Hala Systems, Inc.
0x0B33	ARMATURA LLC
0x0B34	CONZUMEX INDUSTRIES PRIVATE LIMITED
0x0B35	BH SENS
0x0B36	SINTEF
0x0B37	Omnivoltaic Energy Solutions Limited Company
0x0B38	WISYCOM S.R.L.
0x0B39	Red 100 Lighting Co., ltd.
0x0B3A	Impact Biosystems, Inc.
0x0B3B	AIC semiconductor (Shanghai) Co., Ltd.
0x0B3C	Dodge Industrial, Inc.
0x0B3D	REALTIMEID AS
0x0B3E	ISEO Serrature S.p.a.
0x0B3F	MindRhythm, Inc.
0x0B40	Havells India Limited
0x0B41	Sentrax GmbH
0x0B42	TSI
0x0B43	INCITAT ENVIRONNEMENT
0x0B44	nFore Technology Co., Ltd.
0x0B45	Electronic Sensors, Inc.
0x0B46	Bird Rides, Inc.
0x0B47	Gentex Corporation
0x0B48	NIO USA, Inc.
0x0B49	SkyHawke Technologies
0x0B4A	Nomono AS
0x0B4B	EMS Integrators, LLC
0x0B4C	BiosBob.Biz
0x0B4D	Adam Hall GmbH
0x0B4E	ICP Systems B.V.

0x0B4F	Breezi.io, Inc.
0x0B50	Mesh Systems LLC
0x0B51	FUN FACTORY GmbH
0x0B52	ZIIP Inc
0x0B53	SHENZHEN KAADAS INTELLIGENT TECHNOLOGY CO.,Ltd
0x0B54	Emotion Fitness GmbH & Co. KG
0x0B55	H G M Automotive Electronics, Inc.
0x0B56	BORA - Vertriebs GmbH & Co KG
0x0B57	CONVERTRONIX TECHNOLOGIES AND SERVICES LLP
0x0B58	TOKAI-DENSHI INC
0x0B59	Versa Group B.V.
0x0B5A	H.P. Shelby Manufacturing, LLC.
0x0B5B	Shenzhen ImagineVision Technology Limited
0x0B5C	Exponential Power, Inc.
0x0B5D	Fujian Newland Auto-ID Tech. Co., Ltd.
0x0B5E	CELLCONTROL, INC.
0x0B5F	Rivieh, Inc.
0x0B60	RATOC Systems, Inc.
0x0B61	Sentek Pty Ltd
0x0B62	NOVEA ENERGIES
0x0B63	Innolux Corporation
0x0B64	NingBo klite Electric Manufacture Co.,LTD
0x0B65	The Apache Software Foundation
0x0B66	MITSUBISHI ELECTRIC AUTOMATION (THAILAND) COMPANY LIMITED
0x0B67	CleanSpace Technology Pty Ltd
0x0B68	Quha oy
0x0B69	Addaday
0x0B6A	Dymo
0x0B6B	Samsara Networks, Inc
0x0B6C	Sensitech, Inc.
0x0B6D	SOLUM CO., LTD
0x0B6E	React Mobile
0x0B6F	Shenzhen Malide Technology Co.,Ltd
0x0B70	JDRF Electromag Engineering Inc
0x0B71	lilbit ODM AS
0x0B72	Geeknet, Inc.

0x0B73	HARADA INDUSTRY CO., LTD.
0x0B74	BQN
0x0B75	Triple W Japan Inc.
0x0B76	MAX-co., ltd
0x0B77	Aixlink(Chengdu) Co., Ltd.
0x0B78	FIELD DESIGN INC.
0x0B79	Sankyo Air Tech Co.,Ltd.
0x0B7A	Shenzhen KTC Technology Co.,Ltd.
0x0B7B	Hardcoder Oy
0x0B7C	Scangrip A/S
0x0B7D	FoundersLane GmbH
0x0B7E	Offcode Oy
0x0B7F	ICU tech GmbH
0x0B80	AXELIFE
0x0B81	SCM Group
0x0B82	Mammut Sports Group AG
0x0B83	Taiga Motors Inc.
0x0B84	Presidio Medical, Inc.
0x0B85	VIMANA TECH PTY LTD
0x0B86	Trek Bicycle
0x0B87	Ampetronic Ltd
0x0B88	Muguang (Guangdong) Intelligent Lighting Technology Co., Ltd
0x0B89	Rotronic AG
0x0B8A	Seiko Instruments Inc.
0x0B8B	American Technology Components, Incorporated
0x0B8C	MOTREX
0x0B8D	Pertech Industries Inc
0x0B8E	Gentle Energy Corp.
0x0B8F	Senscomm Semiconductor Co., Ltd.
0x0B90	Ineos Automotive Limited
0x0B91	Alfen ICU B.V.
0x0B92	Citisend Solutions, SL
0x0B93	Hangzhou BroadLink Technology Co., Ltd.
0x0B94	Dreem SAS
0x0B95	Netwake GmbH
0x0B96	Telecom Design

0x0B97	SILVER TREE LABS, INC.
0x0B98	Gymstory B.V.
0x0B99	The Goodyear Tire & Rubber Company
0x0B9A	Beijing Wisepool Infinite Intelligence Technology Co.,Ltd
0x0B9B	GISMAN
0x0B9C	Komatsu Ltd.
0x0B9D	Sensoria Holdings LTD
0x0B9E	Audio Partnership Plc
0x0B9F	Group Lotus Limited
0x0BA0	Data Sciences International
0x0BA1	Bunn-O-Matic Corporation
0x0BA2	TireCheck GmbH
0x0BA3	Sonova Consumer Hearing GmbH
0x0BA4	Vervent Audio Group
0x0BA5	SONICOS ENTERPRISES, LLC
0x0BA6	Nissan Motor Co., Ltd.
0x0BA7	hearX Group (Pty) Ltd
0x0BA8	GLOWFORGE INC.
0x0BA9	Allterco Robotics ltd
0x0BAA	Infinitegra, Inc.
0x0BAB	Grandex International Corporation
0x0BAC	Machfu Inc.
0x0BAD	Roambotics, Inc.
0x0BAE	Soma Labs LLC
0x0BAF	NITTO KOGYO CORPORATION
0x0BB0	Ecolab Inc.
0x0BB1	Beijing ranxin intelligence technology Co.,LTD
0x0BB2	Fjorden Electra AS
0x0BB3	Flender GmbH
0x0BB4	New Cosmos USA, Inc.
0x0BB5	Xirgo Technologies, LLC
0x0BB6	Build With Robots Inc.
0x0BB7	IONA Tech LLC
0x0BB8	INNOVAG PTY. LTD.
0x0BB9	SaluStim Group Oy
0x0BBA	Huso, INC

0x0BBB	SWISSINNO SOLUTIONS AG
0x0BBC	T2REALITY SOLUTIONS PRIVATE LIMITED
0x0BBD	ETHEORY PTY LTD
0x0BBE	SAAB Aktiebolag
0x0BBF	HIMSA II K/S
0x0BC0	READY FOR SKY LLP
0x0BC1	Miele & Cie. KG
0x0BC2	EntWick Co.
0x0BC3	MCOT INC.
0x0BC4	TECHTICS ENGINEERING B.V.
0x0BC5	Aperia Technologies, Inc.
0x0BC6	TCL COMMUNICATION EQUIPMENT CO.,LTD.
0x0BC7	Signtle Inc.
0x0BC8	OTF Distribution, LLC
0x0BC9	Neuvatek Inc.
0x0BCA	Perimeter Technologies, Inc.
0x0BCB	Divesoft s.r.o.
0x0BCC	Sylvac sa
0x0BCD	Amiko srl
0x0BCE	Neurosity, Inc.
0x0BCF	LL Tec Group LLC
0x0BD0	Durag GmbH
0x0BD1	Hubei Yuan Times Technology Co., Ltd.
0x0BD2	IDEC
0x0BD3	Procon Analytics, LLC
0x0BD4	ndd Medizintechnik AG
0x0BD5	Super B Lithium Power B.V.
0x0BD6	Shenzhen Injoinic Technology Co., Ltd.
0x0BD7	VINFAST TRADING AND PRODUCTION JOINT STOCK COMPANY
0x0BD8	PURA SCENTS, INC.
0x0BD9	Elics Basis Ltd.
0x0BDA	Aardex Ltd.
0x0BDB	CHAR-BROIL, LLC
0x0BDC	Ledworks S.r.l.
0x0BDD	Coroflo Limited
0x0BDE	Yale

0x0BDF	WINKEY ENTERPRISE (HONG KONG) LIMITED
0x0BE0	Koizumi Lighting Technology corp.
0x0BE1	Back40 Precision
0x0BE2	OTC engineering
0x0BE3	Comtel Systems Ltd.
0x0BE4	Deepfield Connect GmbH
0x0BE5	ZWILLING J.A. Henckels Aktiengesellschaft
0x0BE6	Puratap Pty Ltd
0x0BE7	Fresnel Technologies, Inc.
0x0BE8	Sensormate AG
0x0BE9	Shindengen Electric Manufacturing Co., Ltd.
0x0BEA	Twenty Five Seven, prodaja in storitve, d.o.o.
0x0BEB	Luna Health, Inc.
0x0BEC	Miracle-Ear, Inc.
0x0BED	CORAL-TAIYI Co. Ltd.
0x0BEE	LINKSYS USA, INC.
0x0BEF	Safetytest GmbH
0x0BF0	KIDO SPORTS CO., LTD.
0x0BF1	Site IQ LLC
0x0BF2	Angel Medical Systems, Inc.
0x0BF3	PONE BIOMETRICS AS
0x0BF4	ER Lab LLC
0x0BF5	T5 tek, Inc.
0x0BF6	greenTEG AG
0x0BF7	Wacker Neuson SE
0x0BF8	Innovacionnye Resheniya
0x0BF9	Alio, Inc
0x0BFA	CleanBands Systems Ltd.
0x0BFB	Dodam Enersys Co., Ltd
0x0BFC	T+A elektroakustik GmbH & Co.KG
0x0BFD	Esmé Solutions
0x0BFE	Media-Cartec GmbH
0x0BFF	Ratio Electric BV
0x0C00	MQA Limited
0x0C01	NEOWRK SISTEMAS INTELIGENTES S.A.
0x0C02	Loomanet, Inc.

0x0C03	Puff Corp
0x0C04	Happy Health, Inc.
0x0C05	Montage Connect, Inc.
0x0C06	LED Smart Inc.
0x0C07	CONSTRUKTS, INC.
0x0C08	limited liability company "Red"
0x0C09	Senic Inc.
0x0C0A	Automated Pet Care Products, LLC
0x0C0B	aconno GmbH
0x0C0C	Mendeltron, Inc.
0x0C0D	Mereltron bv
0x0C0E	ALEX DENKO CO.,LTD.
0x0C0F	AETERLINK
0x0C10	Cosmed s.r.l.
0x0C11	Gordon Murray Design Limited
0x0C12	IoSA
0x0C13	Scandinavian Health Limited
0x0C14	Fasetto, Inc.
0x0C15	Geva Sol B.V.
0x0C16	TYKEE PTY. LTD.
0x0C17	SomnoMed Limited
0x0C18	CORROHM
0x0C19	Arlo Technologies, Inc.
0x0C1A	Catapult Group International Ltd
0x0C1B	Rockchip Electronics Co., Ltd.
0x0C1C	GEMU
0x0C1D	OFF Line Japan Co., Ltd.
0x0C1E	EC sense co., Ltd
0x0C1F	LVI Co.
0x0C20	COMELIT GROUP S.P.A.
0x0C21	Foshan Viomi Electrical Technology Co., Ltd
0x0C22	Glamo Inc.
0x0C23	KEYTEC,Inc.
0x0C24	SMARTD TECHNOLOGIES INC.
0x0C25	JURA Elektroapparate AG
0x0C26	Performance Electronics, Ltd.

0x0C27	Pal Electronics
0x0C28	Embecta Corp.
0x0C29	DENSO AIRCOOL CORPORATION
0x0C2A	Caresix Inc.
0x0C2B	GigaDevice Semiconductor Inc.
0x0C2C	Zeku Technology (Shanghai) Corp., Ltd.
0x0C2D	OTF Product Sourcing, LLC
0x0C2E	Easee AS
0x0C2F	BEEHERO, INC.
0x0C30	McIntosh Group Inc
0x0C31	KINDOO LLP
0x0C32	Xian Yisuobao Electronic Technology Co., Ltd.
0x0C33	Exeger Operations AB
0x0C34	BYD Company Limited
0x0C35	Thermokon-Sensortechnik GmbH
0x0C36	Cosmicnode BV
0x0C37	SignalQuest, LLC
0x0C38	Noritz Corporation.
0x0C39	TIGER CORPORATION
0x0C3A	Equinosis, LLC
0x0C3B	ORB Innovations Ltd
0x0C3C	Classified Cycling
0x0C3D	Wrmth Corp.
0x0C3E	BELLDESIGN Inc.
0x0C3F	Stinger Equipment, Inc.
0x0C40	HORIBA, Ltd.
0x0C41	Control Solutions LLC
0x0C42	Heath Consultants Inc.
0x0C43	Berlinger & Co. AG
0x0C44	ONCELABS LLC
0x0C45	Brose Verwaltung SE, Bamberg
0x0C46	Granwin IoT Technology (Guangzhou) Co.,Ltd
0x0C47	Epsilon Electronics,lnc
0x0C48	VALEO MANAGEMENT SERVICES
0x0C49	twopounds gmbh
0x0C4A	atSpiro ApS

0x0C4B	ADTRAN, Inc.
0x0C4C	Orpyx Medical Technologies Inc.
0x0C4D	Seekwave Technology Co.,ltd.
0x0C4E	Tactile Engineering, Inc.
0x0C4F	SharkNinja Operating LLC
0x0C50	Imostar Technologies Inc.
0x0C51	INNOVA S.R.L.
0x0C52	ESCEA LIMITED
0x0C53	Taco, Inc.
0x0C54	HiViz Lighting, Inc.
0x0C55	Zintouch B.V.
0x0C56	Rheem Sales Company, Inc.
0x0C57	UNEEG medical A/S
0x0C58	Hykso Inc.
0x0C59	CYBERDYNE Inc.
0x0C5A	Lockswitch Sdn Bhd
0x0C5B	Alban Giacomo S.P.A.
0x0C5C	MGM WIRELESSS HOLDINGS PTY LTD
0x0C5D	StepUp Solutions ApS
0x0C5E	BlueID GmbH
0x0C5F	Nanjing Linkpower Microelectronics Co.,Ltd
0x0C60	KEBA Energy Automation GmbH
0x0C61	NNOXX, Inc
0x0C62	Phiaton Corporation
0x0C63	phg Peter Hengstler GmbH + Co. KG
0x0C64	dormakaba Holding AG
0x0C65	WAKO CO,.LTD
0x0C66	DEN Smart Home B.V.
0x0C67	TRACKTING S.R.L.
0x0C68	Emerja Corporation
0x0C69	BLITZ electric motors. LTD
0x0C6A	CONSORCIO TRUST CONTROL - NETTEL
0x0C6B	GILSON SAS
0x0C6C	SNIFF LOGIC LTD
0x0C6D	Fidure Corp.
0x0C6E	Sensa LLC

0x0C6F	Parakey AB
0x0C70	SCARAB SOLUTIONS LTD
0x0C71	BitGreen Technolabz (OPC) Private Limited
0x0C72	StreetCar ORV, LLC
0x0C73	Truma Gerätetechnik GmbH & Co. KG
0x0C74	yupiteru
0x0C75	Embedded Engineering Solutions LLC
0x0C76	Shenzhen Gwell Times Technology Co. , Ltd
0x0C77	TEAC Corporation
0x0C78	CHARGTRON IOT PRIVATE LIMITED
0x0C79	Zhuhai Smartlink Technology Co., Ltd
0x0C7A	Triductor Technology (Suzhou), Inc.
0x0C7B	PT SADAMAYA GRAHA TEKNOLOGI
0x0C7C	Mopeka Products LLC
0x0C7D	3ALogics, Inc.
0x0C7E	BOOMING OF THINGS
0x0C7F	Rochester Sensors, LLC
0x0C80	CARDIOID - TECHNOLOGIES, LDA
0x0C81	Carrier Corporation
0x0C82	NACON
0x0C83	Watchdog Systems LLC
0x0C84	MAXON INDUSTRIES, INC.
0x0C85	Amlogic, Inc.
0x0C86	Qingdao Eastsoft Communication Technology Co.,Ltd
0x0C87	Weltek Technologies Company Limited
0x0C88	Nextivity Inc.
0x0C89	AGZZX OPTOELECTRONICS TECHNOLOGY CO., LTD
0x0C8A	A.GLOBAL co.,Ltd.
0x0C8B	Heavys Inc
0x0C8C	T-Mobile USA
0x0C8D	tonies GmbH
0x0C8E	Technocon Engineering Ltd.
0x0C8F	Radar Automobile Sales(Shandong)Co.,Ltd.
0x0C90	WESCO AG
0x0C91	Yashu Systems
0x0C92	Kesseböhmer Ergonomietechnik GmbH

0x0C93	Movesense Oy
0x0C94	Baxter Healthcare Corporation
0x0C95	Gemstone Lights Canada Ltd.
0x0C96	H+B Hightech GmbH
0x0C97	Deako
0x0C98	MiX Telematics International (PTY) LTD
0x0C99	Vire Health Oy
0x0C9A	ALF Inc.
0x0C9B	NTT sonority, Inc.
0x0C9C	Sunstone-RTLS Ipari Szolgaltato Korlatolt Felelossegu Tarsasag
0x0C9D	Ribbiot, INC.
0x0C9E	ECCEL CORPORATION SAS
0x0C9F	Dragonfly Energy Corp.
0x0CA0	BIGBEN
0x0CA1	YAMAHA MOTOR CO.,LTD.
0x0CA2	XSENSE LTD
0x0CA3	MAQUET GmbH
0x0CA4	MITSUBISHI ELECTRIC LIGHTING CO, LTD
0x0CA5	Princess Cruise Lines, Ltd.
0x0CA6	Megger Ltd
0x0CA7	Verve InfoTec Pty Ltd
0x0CA8	Sonas, Inc.
0x0CA9	Mievo Technologies Private Limited
0x0CAA	Shenzhen Poseidon Network Technology Co., Ltd
0x0CAB	HERUTU ELECTRONICS CORPORATION
0x0CAC	Shenzhen Shokz Co.,Ltd.
0x0CAD	Shenzhen Openhearing Tech CO., LTD .
0x0CAE	Evident Corporation
0x0CAF	NEURINNOV
0x0CB0	SwipeSense, Inc.
0x0CB1	RF Creations
0x0CB2	SHINKAWA Sensor Technology, Inc.
0x0CB3	janova GmbH
0x0CB4	Eberspaecher Climate Control Systems GmbH
0x0CB5	Racketry, d. o. o.
0x0CB6	THE EELECTRIC MACARON LLC

0x0CB7	Cucumber Lighting Controls Limited
0x0CB8	Shanghai Proxy Network Technology Co., Ltd.
0x0CB9	seca GmbH & Co. KG
0x0CBA	Ameso Tech (OPC) Private Limited
0x0CBB	Emlid Tech Kft.
0x0CBC	TROX GmbH
0x0CBD	Pricer AB
0x0CBF	Forward Thinking Systems LLC.
0x0CC0	Garnet Instruments Ltd.
0x0CC1	CLEIO Inc.
0x0CC2	Anker Innovations Limited
0x0CC3	HMD Global Oy
0x0CC4	ABUS August Bremicker Soehne Kommanditgesellschaft
0x0CC5	Open Road Solutions, Inc.
0x0CC6	Serial Technology Corporation
0x0CC7	SB C&S Corp.
0x0CC8	TrikThom
0x0CC9	Innocent Technology Co., Ltd.
0x0CCA	Cyclops Marine Ltd
0x0CCB	NOTHING TECHNOLOGY LIMITED
0x0CCC	Kord Defence Pty Ltd
0x0CCD	YanFeng Visteon(Chongqing) Automotive Electronic Co.,Ltd
0x0CCE	SENOSPACE LLC
0x0CCF	Shenzhen CESI Information Technology Co., Ltd.
0x0CD0	MooreSilicon Semiconductor Technology (Shanghai) Co., LTD.
0x0CD1	Imagine Marketing Limited
0x0CD2	EQOM SSC B.V.
0x0CD3	TechSwipe
0x0CD4	Reoqoo IoT Technology Co., Ltd.
0x0CD5	Numa Products, LLC
0x0CD6	HHO (Hangzhou) Digital Technology Co., Ltd.
0x0CD7	Maztech Industries, LLC
0x0CD8	SIA Mesh Group
0x0CD9	Minami acoustics Limited
0x0CDA	Wolf Steel ltd
0x0CDB	Circus World Displays Limited

0x0CDC	Ypsomed AG
0x0CDD	Alif Semiconductor, Inc.
0x0CDE	RESPONSE TECHNOLOGIES, LTD.
0x0CDF	SHENZHEN CHENYUN ELECTRONICS CO., LTD
0x0CE0	VODALOGIC PTY LTD
0x0CE1	Regal Beloit America, Inc.
0x0CE2	CORVENT MEDICAL, INC.
0x0CE3	Taiwan Fuhsing
0x0CE4	Off-Highway Powertrain Services Germany GmbH
0x0CE5	Amina Distribution AS
0x0CE6	McWong International, Inc.
0x0CE7	TAG HEUER SA
0x0CE8	Dongguan Yougo Electronics Co.,Ltd.
0x0CE9	PEAG, LLC dba JLab Audio
0x0CEA	HAYWARD INDUSTRIES, INC.
0x0CEB	Shenzhen Tingting Technology Co. LTD
0x0CEC	Pacific Coast Fishery Services (2003) Inc.
0x0CED	CV. NURI TEKNIK
0x0CEE	MadgeTech, Inc
0x0CEF	POGS B.V.
0x0CF0	THOTAKA TEKHNOLOGIES INDIA PRIVATE LIMITED
0x0CF1	Midmark
0x0CF2	BestSens AG
0x0CF3	Radio Sound
0x0CF4	SOLUX PTY LTD
0x0CF5	BOS Balance of Storage Systems AG
0x0CF6	OJ Electronics A/S
0x0CF7	TVS Motor Company Ltd.
0x0CF8	core sensing GmbH
0x0CF9	Tamblue Oy
0x0CFA	Protect Animals With Satellites LLC
0x0CFB	Tyromotion GmbH
0x0CFC	ElectronX design
0x0CFD	Wuhan Woncan Construction Technologies Co., Ltd.
0x0CFE	Thule Group AB
0x0CFF	Ergodriven Inc

0x0D00	Sparkpark AS
0x0D01	KEEPEN
0x0D02	Rocky Mountain ATV/MC Jake Wilson
0x0D03	MakuSafe Corp
0x0D04	Bartec Auto Id Ltd
0x0D05	Energy Technology and Control Limited
0x0D06	doubleO Co., Ltd.
0x0D07	Datalogic S.r.l.
0x0D08	Datalogic USA, Inc.
0x0D09	Leica Geosystems AG
0x0D0A	CATEYE Co., Ltd.
0x0D0B	Research Products Corporation
0x0D0C	Planmeca Oy
0x0D0D	C.Ed. Schulte GmbH Zylinderschlossfabrik
0x0D0E	PetVoice Co., Ltd.
0x0D0F	Timebirds Australia Pty Ltd
0x0D10	JVC KENWOOD Corporation
0x0D11	Great Dane LLC
0x0D12	Spartek Systems Inc.
0x0D13	MERRY ELECTRONICS CO., LTD.
0x0D14	Merry Electronics (S) Pte Ltd
0x0D15	Spark
0x0D16	Nations Technologies Inc.
0x0D17	Akix S.r.l.
0x0D18	Bioliberty Ltd
0x0D19	C.G. Air Systemes Inc.
0x0D1A	Maturix ApS
0x0D1B	RACHIO, INC.
0x0D1C	LIMBOID LLC
0x0D1D	Electronics4All Inc.
0x0D1E	FESTINA LOTUS SA
0x0D1F	Synkopi, Inc.
0x0D20	SCIENTERRA LIMITED
0x0D21	Cennox Group Limited
0x0D22	Cedarware, Corp.
0x0D23	GREE Electric Appliances, Inc. of Zhuhai

0x0D24	Japan Display Inc.
0x0D25	System Elite Holdings Group Limited
0x0D26	Burkert Werke GmbH & Co. KG
0x0D27	velocitux
0x0D28	FUJITSU COMPONENT LIMITED
0x0D29	MIYAKAWA ELECTRIC WORKS LTD.
0x0D2A	PhysioLogic Devices, Inc.
0x0D2B	Sensoryx AG
0x0D2C	SIL System Integration Laboratory GmbH
0x0D2D	Cooler Pro, LLC
0x0D2E	Advanced Electronic Applications, Inc
0x0D2F	Delta Development Team, Inc
0x0D30	Laxmi Therapeutic Devices, Inc.
0x0D31	SYNCHRON, INC.
0x0D32	Badger Meter
0x0D33	Micropower Group AB
0x0D34	ZILLIOT TECHNOLOGIES PRIVATE LIMITED
0x0D35	Universidad Politecnica de Madrid
0x0D36	XIHAO INTELLIGENGT TECHNOLOGY CO., LTD
0x0D37	Zerene Inc.
0x0D38	CycLock
0x0D39	Systemic Games, LLC
0x0D3A	Frost Solutions, LLC
0x0D3B	Lone Star Marine Pty Ltd
0x0D3C	SIRONA Dental Systems GmbH
0x0D3D	bHaptics Inc.
0x0D3E	LUMINOAH, INC.
0x0D3F	Vogels Products B.V.

7.2   Company Identifiers by Name

Last Modified: 2023-12-11

Filename: company_identifiers.yaml

Name	Value
10AK Technologies	0x0116
11 Health & Technologies Limited	0x0872
16Lab Inc	0x0242
1bar.net Limited	0x087E
1UP USA.com llc	0x0449
2048450 Ontario Inc	0x045A
2587702 Ontario Inc.	0x0A37
2N TELEKOMUNIKACE a.s.	0x07B3
3ALogics, Inc.	0x0C7D
3Com	0x0005
3DiJoy Corporation	0x0054
3DSP Corporation	0x0049
3flares Technologies Inc.	0x0331
3IWare Co., Ltd.	0x03D9
3M	0x02D0
3SI Security Systems, Inc	0x0A45
4eBusiness GmbH	0x0775
4iiii Innovations Inc.	0x0679
4MOD Technology	0x04DD
5th Element Ltd	0x04D4
701x Inc.	0x0AF3
70mai Co.,Ltd.	0x0909
8Power Limited	0x0824
9374-7319 Quebec inc	0x096C
9974091 Canada Inc.	0x0513
9Solutions Oy	0x0066
A & R Cambridge	0x007C
A puissance 3	0x0839
A&D Engineering, Inc.	0x0069
A-Safe Limited	0x03B8
A.GLOBAL co.,Ltd.	0x0C8A
A.W. Chesterton Company	0x07C1

AAMP of America	0x00BE
Aardex Ltd.	0x0BDA
AB Electrolux	0x0705
ABAX AS	0x0711
ABB Inc	0x08B7
ABB Oy	0x06BD
ABB S.p.A.	0x082E
Abbott	0x03BB
ABEYE	0x0974
Abiogenix Inc.	0x01C7
Able Trend Technology Limited	0x018A
ABLEPAY TECHNOLOGIES AS	0x09D1
ABLIC Inc.	0x0731
ABOV Semiconductor	0x02CA
Above Average Outcomes, Inc.	0x00EE
Absolute Audio Labs B.V.	0x0993
ABUS August Bremicker Soehne Kommanditgesellschaft	0x0CC4
Accel Semiconductor Ltd.	0x004A
Accelerated Systems	0x0B1D
Accent Advanced Systems SLU	0x08C0
Access Co., Ltd	0x07FB
Accumulate AB	0x0156
ACE CAD Enterprise Co., Ltd. (ACECAD)	0x03A5
Ace Sensor Inc	0x00BC
AceUni Corp., Ltd.	0x00F8
ACKme Networks, Inc.	0x0246
ACL Airshop B.V.	0x0B2A
Aclara Technologies LLC	0x08A0
aconno GmbH	0x0C0B
ACOS CO.,LTD.	0x085C
Acoustic Stream Corporation	0x0194
Acromag	0x035F
ACS-Control-System GmbH	0x05EA
Actev Motors, Inc.	0x0968
Actions (Zhuhai) Technology Co., Limited	0x03E0
ActiveBlu Corporation	0x0389

ACTS Technologies	0x00E8
Acubit ApS	0x073C
Acuity Brands Lighting, Inc	0x0346
Acurable Limited	0x05D3
adafruit industries	0x0822
Adam Hall GmbH	0x0B4D
ADATA Technology Co., LTD.	0x08D4
AdBabble Local Commerce Inc.	0x0257
ADC Technology, Inc.	0x0492
Addaday	0x0B69
Adero, Inc.	0x069A
Adevo Consulting AB	0x0AAD
ADH GUARDIAN USA LLC	0x0610
ADHERIUM(NZ) LIMITED	0x05A2
adidas AG	0x00C3
Adolene, Inc.	0x0530
Adolf Wuerth GmbH & Co KG	0x093D
ADTRAN, Inc.	0x0C4B
Advanced Application Design, Inc.	0x01EA
Advanced Electronic Applications, Inc	0x0D2E
Advanced Electronic Designs, Inc.	0x054B
Advanced PANMOBIL systems GmbH & Co. KG	0x0091
Advanced Telemetry Systems, Inc.	0x0663
ADVEEZ	0x098E
AeroScout	0x03A7
Aerosens LLC	0x09BC
AETERLINK	0x0C0F
AEV spol. s r.o.	0x0793
Afero, Inc.	0x02D2
AFFORDABLE ELECTRONICS INC	0x0574
AG Measurematics Pvt. Ltd.	0x0316
Agitron d.o.o.	0x0944
AGZZX OPTOELECTRONICS TECHNOLOGY CO., LTD	0x0C89
AIAIAI ApS	0x0AAF
AIC semiconductor (Shanghai) Co., Ltd.	0x0B3B
AINA-Wireless Inc.	0x02CB

Air-Weigh	0x0A30
Airbly Inc.	0x03B7
AirBolt Pty Ltd	0x036D
Aireware LLC	0x0135
AiRISTA	0x0928
Airoha Technology Corp.	0x07E3
Airoha Technology Corp.	0x0094
AIRSTAR	0x09FF
Airtago	0x0406
Airthings ASA	0x0334
AirTurn, Inc.	0x0122
Aixlink(Chengdu) Co., Ltd.	0x0B77
AJP2 Holdings, LLC	0x0337
Akciju sabiedriba "SAF TEHNIKA"	0x0702
Akix S.r.l.	0x0D17
Aktiebolaget Regin	0x098F
Aktiebolaget Sandvik Coromant	0x07EF
AL-KO Geraete GmbH	0x0AD7
Alango Technologies Ltd	0x06E2
Alarm.com Holdings, Inc	0x06C1
Alatech Tehnology	0x023A
Alban Giacomo S.P.A.	0x0C5B
Albertronic BV	0x091A
Albrecht JUNG	0x0527
AlbynMedical	0x04BD
ALCARE Co., Ltd.	0x06EF
Alcatel	0x0024
ALE International	0x039C
ALEX DENKO CO.,LTD.	0x0C0E
ALF Inc.	0x0C9A
Alfa Laval Corporate AB	0x0B10
Alfen ICU B.V.	0x0B91
Alflex Products B.V.	0x0860
Alfred International Inc.	0x06F3
Alfred Kaercher SE & Co. KG	0x07E2
Algoria	0x037A

Alif Semiconductor, Inc.	0x0CDD
Alio, Inc	0x0BF9
ALIZENT International	0x0A86
Allegion	0x013B
Allswell Inc.	0x03AE
Allterco Robotics ltd	0x0BA9
Almendo Technologies GmbH	0x06E8
Alo AB	0x065E
ALOTTAZS LABS, LLC	0x029D
Alpha Audiotronics, Inc.	0x0353
Alpha Nodus, inc.	0x03B4
Alpine Electronics (China) Co., Ltd	0x0140
Alpine Labs LLC	0x03A1
Alps Alpine Co., Ltd.	0x0272
Alpwise	0x009A
ALT-TEKNIK LLC	0x0588
Altaneos	0x080A
Alticor Inc.	0x0431
Altonics	0x0716
ALTYOR	0x0259
Aluna	0x06E4
amadas	0x03BD
AmaterZ, Inc.	0x077B
Amazon.com Services LLC	0x0171
ambie	0x0A56
Ambient Sensors LLC	0x0916
Ambimat Electronics	0x0148
Ambiq	0x09AC
Ambystoma Labs Inc.	0x05B8
AMC International Alfa Metalcraft Corporation AG	0x0946
American Music Environments	0x02E8
American Technology Components, Incorporated	0x0B8B
Ameso Tech (OPC) Private Limited	0x0CBA
AMETEK, Inc.	0x0AF6
AMICCOM Electronics Corporation	0x00C0
Amiko srl	0x0BCD

Amina Distribution AS	0x0CE5
Amlogic, Inc.	0x0C85
Amotus Solutions	0x0325
Ampetronic Ltd	0x0B87
Ampler Bikes OU	0x0A00
Amplifico	0x0626
ams AG	0x0B21
Amsted Digital Solutions Inc.	0x0688
Amtech Systems, LLC	0x074D
Amtronic Sverige AB	0x0517
Analog Devices, Inc.	0x04B7
AND!XOR LLC	0x049E
Andon Health Co.,Ltd	0x0804
Andreas Stihl AG & Co. KG	0x03DD
Androtec GmbH	0x04FA
Angee Technologies Ltd.	0x051B
Angel Medical Systems, Inc.	0x0BF2
Anhui Huami Information Technology Co., Ltd.	0x0157
Anhui Listenai Co	0x0AAB
Anima	0x02CF
Animas Corp	0x0271
Anker Innovations Limited	0x0CC2
Anki Inc.	0x05F8
Anloq Technologies Inc.	0x04D2
AnotherBrain inc.	0x09C0
Anova Applied Electronics	0x05D0
Antitronics Inc.	0x075C
Anton Paar GmbH	0x0990
AntTail.com	0x0572
Anyka (Guangzhou) Microelectronics Technology Co, LTD	0x01F8
AON2 Ltd.	0x09DC
Aperia Technologies, Inc.	0x0BC5
Apexar Technologies S.A.	0x0546
API-K	0x0A1D
Aplix Corporation	0x00BD
Apogee Instruments	0x0644

Apollo Neuroscience, Inc.	0x07A1
Apollogic Sp. z o.o.	0x0A21
Appception, Inc.	0x033A
Appion Inc.	0x038C
Apple, Inc.	0x004C
Applied Neural Research Corp	0x05DA
Applied Science, Inc.	0x03BE
AppNearMe Ltd	0x0373
Appside co., ltd.	0x043B
Apption Labs Inc.	0x037B
Apptricity Corporation	0x0952
APT Ltd.	0x004F
Aptcode Solutions	0x026F
AR Timing	0x0201
ARANZ Medical Limited	0x0580
Arblet Inc.	0x05FB
Arch Systems Inc.	0x03C0
ARCHOS SA	0x00CF
ARCOM	0x084A
Ardic Technology	0x02EB
ARDUINO SA	0x09A3
Arendi AG	0x011D
Areus Engineering GmbH	0x029F
Argenox Technologies	0x0240
Arioneo	0x0348
Arlo Technologies, Inc.	0x0C19
ARMATURA LLC	0x0B33
ARP Devices Limited	0x00A8
ART AND PROGRAM, INC.	0x0766
ART SPA	0x0B30
Arwin Technology Limited	0x0557
Asahi Kasei Corporation	0x0965
ASB Bank Ltd	0x03BC
Ascensia Diabetes Care US Inc.	0x0167
Aseptika Ltd	0x027C
Askey Computer Corp.	0x08EE

Aspenta International	0x0318
ASPion GmbH	0x062C
ASR Microelectronics (Shanghai) Co., Ltd.	0x0910
ASR Microelectronics(ShenZhen)Co., Ltd.	0x0917
ASSA ABLOY	0x012E
ASTEM Co.,Ltd.	0x0939
Asthrea D.O.O.	0x0630
Astro, Inc.	0x0324
Aterica Inc.	0x0386
Atheros Communications, Inc.	0x0045
Athlos Oy	0x09EA
Atmel Corporation	0x0013
Atmosic Technologies, Inc.	0x0A24
Atomation	0x0455
atSpiro ApS	0x0C4A
Atus BV	0x0109
Audeara Pty Ltd	0x09F2
Audi AG	0x010E
audifon GmbH & Co. KG	0x0784
Audio Partnership Plc	0x0B9E
Audio-Technica Corporation	0x0618
Audiodo AB	0x0710
Audionics System, INC.	0x0569
August Home, Inc	0x01D1
Aurea Solucoes Tecnologicas Ltda.	0x07AE
Austco Communication Systems	0x00D5
AUTEC Gesellschaft fuer Automationstechnik mbH	0x09B5
AuthAir, Inc	0x02F3
Authomate Inc	0x0404
AutoMap LLC	0x01EB
Automated Pet Care Products, LLC	0x0C0A
Automatic Labs, Inc.	0x06DB
Automation Components, Inc.	0x033F
Automotive Data Solutions Inc	0x0488
Autonet Mobile	0x007F
Auxivia	0x04EE

Avack Oy	0x04E5
Avago Technologies	0x004E
Avantis Systems Limited	0x06EE
Avaya Inc.	0x06E0
Avempace SARL	0x0552
Averos FZCO	0x04BE
Avi-on	0x01C9
Avid Identification Systems, Inc.	0x05DB
AVM Berlin	0x001F
Avvel International	0x03C8
AW Company	0x06D8
Awarepoint	0x023C
AwoX	0x0160
AXELIFE	0x0B80
Axentia Technologies AB	0x07BE
Axes System sp. z o. o.	0x0508
Axiomware Systems Incorporated	0x05A3
AXTRO PTE. LTD.	0x0A77
Ayatan Sensors	0x02C6
AYU DEVICES PRIVATE LIMITED	0x0A27
Ayxon-Dynamics GmbH	0x0A02
Azbil Co.	0x080D
B&B Manufacturing Company	0x013F
B&W Group Ltd.	0x014F
B.E.A. S.A.	0x0B0F
Back40 Precision	0x0BE1
Backbone Labs, Inc.	0x0421
Badger Meter	0x0D32
Baidu	0x011C
Band Industries, inc.	0x096E
Band XI International, LLC	0x0064
BandSpeed, Inc.	0x0020
Bang & Olufsen A/S	0x0103
Baracoda Daily Healthtech.	0x0B26
Barnacle Systems Inc.	0x07CC
Barnes Group Inc.	0x0AC6

Barrot Technology Co.,Ltd.	0x08E7
Bartec Auto Id Ltd	0x0D04
BarVision, LLC	0x0932
BASIC MICRO.COM,INC.	0x03ED
BatAndCat	0x017D
Battery-Biz Inc.	0x07BA
Baxter Healthcare Corporation	0x0C94
Bayerische Motoren Werke AG	0x05EB
BBPOS Limited	0x02AB
BD Medical	0x042A
BDE Technology Co., Ltd.	0x00B4
Be Interactive Co., Ltd	0x0708
Beaconzone Ltd	0x06BA
Beam Labs, LLC	0x0622
Beats Electronics	0x00CC
Beautiful Enterprise Co., Ltd.	0x006C
Becker Antriebe GmbH	0x0811
Beco, Inc	0x057E
Becon Technologies Co.,Ltd.	0x03F9
BEEHERO, INC.	0x0C2F
BeerTech LTD	0x083C
Beflex Inc.	0x06B9
BEGA Gantenbrink-Leuchten KG	0x046D
Beghelli Spa	0x0564
Beijing Big Moment Technology Co., Ltd.	0x08EB
Beijing CarePulse Electronic Technology Co, Ltd	0x023B
BEIJING ELECTRIC VEHICLE CO.,LTD	0x09A6
Beijing ESWIN Computing Technology Co., Ltd.	0x0B1F
Beijing Hao Heng Tian Tech Co., Ltd.	0x073D
Beijing HC-Infinite Technology Limited	0x0A46
Beijing Jingdong Century Trading Co., Ltd.	0x0703
Beijing Pinecone Electronics Co.,Ltd.	0x05B7
Beijing ranxin intelligence technology Co.,LTD	0x0BB1
Beijing Smartspace Technologies Inc.	0x0565
Beijing SuperHexa Century Technology CO. Ltd	0x0A67
Beijing Unisoc Technologies Co., Ltd.	0x073F

Beijing Winner Microelectronics Co.,Ltd	0x070C
Beijing Wisepool Infinite Intelligence Technology Co.,Ltd	0x0B9A
Beijing Zero Zero Infinity Technology Co.,Ltd.	0x09F3
BeiJing ZiJie TiaoDong KeJi Co.,Ltd.	0x0B24
Beijing Zizai Technology Co., LTD.	0x0900
beken	0x05F0
Bekey A/S	0x00B2
bel'apps LLC	0x0185
Belkin International, Inc.	0x005C
BELLDESIGN Inc.	0x0C3E
Bellman & Symfon	0x0464
Belparts N.V.	0x06CF
Belun Technology Company Limited	0x0B0A
Benchmark Drives GmbH & Co. KG	0x04FB
benegear, inc.	0x0558
Benning Elektrotechnik und Elektronik GmbH & Co. KG	0x041D
Berlinger & Co. AG	0x0C43
Bernard Krone Holding SE & Co.KG	0x0981
Berner International LLC	0x0875
BeSpoon	0x0674
Bestechnic(Shanghai),Ltd	0x02B0
BestSens AG	0x0CF2
betternotstealmybike UG (with limited liability)	0x08CF
Beurer GmbH	0x0611
bewhere inc	0x0277
bf1systems limited	0x08BD
bGrid B.V.	0x098C
BH SENS	0x0B35
bHaptics Inc.	0x0D3D
BHM-Tech Produktionsgesellschaft m.b.H	0x0988
Big Kaiser Precision Tooling Ltd	0x0992
BIGBEN	0x0CA0
BikeFinder AS	0x056F
Binauric SE	0x00CB
BioEchoNet inc.	0x095E
BioIntelliSense, Inc.	0x08FD

Bioliberty Ltd	0x0D18
BioMech Sensor LLC	0x0365
Biomedical Research Ltd.	0x015B
Biometrika d.o.o.	0x086D
Bionic Avionics Inc.	0x09DB
BioResearch Associates	0x00EC
BIOROWER Handelsagentur GmbH	0x04AF
BiosBob.Biz	0x0B4C
Biotechware SRL	0x084B
BioTex, Inc.	0x04A8
BIOTRONIK SE & Co. KG	0x0979
Biovigil	0x098A
Biovotion AG	0x0624
Biowatch SA	0x05CF
Biral AG	0x07C0
Bird Home Automation GmbH	0x04EB
Bird Rides, Inc.	0x0B46
BIROTA	0x07FE
Bison Group Ltd.	0x01DF
Bitcraze AB	0x01C5
BitGreen Technolabz (OPC) Private Limited	0x0C71
Bitkey Inc.	0x072B
Bitsplitters GmbH	0x00EF
Bitstrata Systems Inc.	0x0350
Bitwards Oy	0x0836
BIXOLON CO.,LTD	0x0A23
Bkon Connect	0x0143
BlackBerry Limited	0x003C
Blackrat Software	0x02F0
Bleb Technology srl	0x0668
Blincam, Inc.	0x04D7
BLINQY	0x09B1
Blippit AB	0x082F
BLITZ electric motors. LTD	0x0C69
Blocks Wearables Ltd.	0x0435
BLOKS GmbH	0x0396

BluDotz Ltd	0x017E
Blue Bite	0x0293
Blue Clover Devices	0x024C
Blue Maestro Limited	0x0133
Blue Peacock GmbH	0x0A0D
Blue Sky Scientific, LLC	0x0339
Blue Sky Scientific, LLC	0x029C
Blue Spark Technologies	0x0477
Blue Speck Labs, LLC	0x021A
Blueair AB	0x060E
Bluegiga	0x0047
BlueID GmbH	0x0C5E
BlueIOT(Beijing) Technology Co.,Ltd	0x0975
BlueKitchen GmbH	0x048F
Bluenetics GmbH	0x07C6
Bluepack S.R.L.	0x073E
BlueRadios, Inc.	0x0085
BlueStreak IoT, LLC	0x09CF
BLUETICKETING SRL	0x0A39
Bluetooth SIG, Inc	0x003F
Bluetrum Technology Co.,Ltd	0x0642
BlueUp	0x0859
BlueX Microelectronics Corp Ltd.	0x09B3
BluPeak	0x0B0C
Blur Product Development	0x02DF
BluStor PMC, Inc.	0x0387
Blyott	0x09CD
BM innovations GmbH	0x032D
BM3	0x0645
BMA ergonomics b.v.	0x02CD
Bobrick Washroom Equipment, Inc.	0x081C
BodyPlus Technology Co.,Ltd	0x06F8
Bodyport Inc.	0x0568
Boehringer Ingelheim Vetmedica GmbH	0x08B6
BOLTT Sports technologies Private limited	0x0366
Bonsai Systems GmbH	0x0462

BOOMING OF THINGS	0x0C7E
BORA - Vertriebs GmbH & Co KG	0x0B56
Borda Technology	0x0AEA
BOS Balance of Storage Systems AG	0x0CF5
Bose Corporation	0x009E
Boss Audio	0x0ADD
Boston Scientific Corporation	0x045D
Bouffalo Lab (Nanjing)., Ltd.	0x0A38
Bout Labs, LLC	0x09B7
BPW Bergische Achsen Kommanditgesellschaft	0x083A
BQN	0x0B74
BRADATECH Corp.	0x01C1
Brady Worldwide Inc.	0x066A
Bragi GmbH	0x0241
Braveheart Wireless, Inc.	0x0913
BRControls Products BV	0x036B
Breakwall Analytics, LLC	0x0582
BREATHINGS Co., Ltd.	0x0931
Breezi.io, Inc.	0x0B4F
Breville Group	0x0955
BriarTek, Inc	0x006D
Brilliant Home Technology, Inc.	0x0820
BRK Brands, Inc.	0x06B0
Broadcom Corporation	0x000F
Bronkhorst High-Tech B.V.	0x0995
Brookfield Equinox LLC	0x0511
Brose Verwaltung SE, Bamberg	0x0C45
Brother Industries, Ltd	0x0755
Bruel & Kjaer Sound & Vibration	0x07A9
BSH	0x01CF
BubblyNet, LLC	0x0788
BUCHI Labortechnik AG	0x0609
Build With Robots Inc.	0x0BB6
Bull Group Company Limited	0x0712
Bunch	0x01C3
Bunn-O-Matic Corporation	0x0BA1

Burkert Werke GmbH & Co. KG	0x0D26
Busch Jaeger Elektro GmbH	0x04E9
Busch Systems International Inc.	0x0A43
Buzz Products Ltd.	0x0671
BYD Company Limited	0x0C34
BYSTAMP	0x087B
Bytestorm Ltd.	0x02E4
Byton North America Corporation	0x07F5
C Technologies	0x0026
C-MAX Asia Limited	0x0774
C. & E. Fein GmbH	0x0996
C.Ed. Schulte GmbH Zylinderschlossfabrik	0x0D0D
C.G. Air Systemes Inc.	0x0D19
C.O.B.O. SpA	0x092F
C2 Development, Inc.	0x029B
C3-WIRELESS, LLC	0x098D
CACI Technologies	0x0ACF
CAEN RFID srl	0x00AA
California Things Inc.	0x070F
Cambridge Animal Technologies Ltd	0x0A18
CAME S.p.A.	0x06C0
Candura Instruments	0x03A2
Candy Hoover Group s.r.l	0x0545
CANDY HOUSE, Inc.	0x055A
Canon Finetech Nisca Inc.	0x0A9D
Canon Inc.	0x01A9
Canopy Growth Corporation	0x0856
Canopy Growth Corporation	0x0835
Capetech	0x0950
CARDIOID - TECHNOLOGIES, LDA	0x0C80
Cardo Systems, Ltd	0x06A1
Care Bloom, LLC	0x0AA2
Carefree Scott Fetzer Co Inc	0x054C
CAREL INDUSTRIES S.P.A.	0x05B2
Caresix Inc.	0x0C2A
Carestream Dental LLC	0x0A92

CareView Communications, Inc.	0x039D
Carewear Corp.	0x0709
Carmanah Technologies Corp.	0x02E3
CARMATE MFG.CO.,LTD	0x05AE
Carol Cole Company	0x084E
Carrier Corporation	0x0C81
Casambi Technologies Oy	0x03C3
CASIO COMPUTER CO., LTD.	0x0178
Catalyft Labs, Inc.	0x093E
Catapult Group International Ltd	0x0C1A
Caterpillar Inc	0x01E3
CATEYE Co., Ltd.	0x0D0A
Cedarware, Corp.	0x0D22
Cell2Jack LLC	0x0604
CellAssist, LLC	0x08C4
CELLCONTROL, INC.	0x0B5E
Cello Hill, LLC	0x0986
Cennox Group Limited	0x0D21
Center ID Corp.	0x052F
Centre Suisse d'Electronique et de Microtechnique SA	0x09BD
Centrica Connected Home	0x0487
CeoTronics AG	0x06D2
Cerebrum Sensor Technologies Inc.	0x0AFC
Cerevast Medical	0x04F3
Cerevo	0x0268
Ceruus	0x019E
Cesar Systems Ltd.	0x07F7
CHACON	0x0B28
Chandler Systems Inc.	0x073A
Changsha JEMO IC Design Co.,Ltd	0x0751
Changzhou Sound Dragon Electronics and Acoustics Co., Ltd	0x068C
Changzhou Yongse Infotech Co., Ltd.	0x012A
Channel Enterprises (HK) Ltd.	0x01A0
CHAR-BROIL, LLC	0x0BDB
Chargelib	0x02A9
Chargifi Limited	0x0423

CHARGTRON IOT PRIVATE LIMITED	0x0C78
Chargy Technologies, SL	0x06F0
Check Technology Solutions LLC	0x08B8
ChefSteps, Inc.	0x0159
Chemtronics	0x02BD
Chengdu Aich Technology Co.,Ltd	0x0AC7
Chengdu Ambit Technology Co., Ltd.	0x0AFA
ChengDu ForThink Technology Co., Ltd.	0x0AE1
Chengdu Synwing Technology Ltd	0x01CD
Cherry GmbH	0x0687
Chess Wise B.V.	0x09D0
Chicony Electronics Co., Ltd.	0x0108
Chip-ing AG	0x03E4
CHIPOLO d.o.o.	0x08C3
Chipsea Technologies (ShenZhen) Corp.	0x06A7
Chrono Therapeutics	0x02B8
CHUO Electronics CO., LTD.	0x0317
Church & Dwight Co., Inc	0x028F
CIMTechniques, Inc.	0x07C3
Cinetix	0x00AF
Circus World Displays Limited	0x0CDB
Ciright	0x0146
Cisco Systems, Inc	0x021B
Citisend Solutions, SL	0x0B92
Citizen Holdings Co., Ltd.	0x02EE
CLABER S.P.A.	0x02B3
Clarinox Technologies Pty. Ltd.	0x00B3
Clarion Co. Inc.	0x012F
Clarius Mobile Health Corp.	0x02FB
Classified Cycling	0x0C3C
CLB B.V.	0x097D
CleanBands Systems Ltd.	0x0BFA
CleanSpace Technology Pty Ltd	0x0B67
Clearity, LLC	0x05F4
Cleer Limited	0x0A80
CLEIO Inc.	0x0CC1

Cleveron AS	0x0A01
CLIM8 LIMITED	0x053E
CliniCloud Inc	0x0291
CLINK	0x03F0
Closed Joint Stock Company "Zavod Flometr" ("Zavod Flometr" CJSC)	0x0972
Cloudleaf, Inc	0x0192
Clover Network, Inc.	0x0721
CME PTE. LTD.	0x0825
CO-AX Technology, Inc.	0x040F
COBI GmbH	0x0338
Coburn Technology, LLC	0x08AB
Cochlear Bone Anchored Solutions AB	0x01BB
Cochlear Limited	0x0497
Code Blue Communications	0x0583
Code Corporation	0x01D8
Code Gears LTD	0x028B
code-Q	0x08DD
Codecoup sp. z o.o. sp. k.	0x05C4
Codefabrik GmbH	0x0ADA
Codegate Ltd	0x010A
Codenex Oy	0x0467
CODIUM	0x0AC4
Cognosos, Inc.	0x0852
Coiler Corporation	0x043D
Cokiya Incorporated	0x019C
Colorfy, Inc.	0x009C
Comarch SA	0x0224
CombiQ AB	0x0A1E
Combustion, LLC	0x09C7
Comcast Cable	0x07A3
COMELIT GROUP S.P.A.	0x0C20
Comm-N-Sense Corp DBA Verigo	0x03AF
Commil Ltd	0x0033
Comodule GMBH	0x020F
Companion Medical, Inc.	0x048E
COMPEGPS TEAM,SOCIEDAD LIMITADA	0x085F

Compumedics Limited	0x0322
Computer Access Technology Corporation (CATC)	0x0034
Computime International Ltd	0x0AAA
Comtel Systems Ltd.	0x0BE3
conbee GmbH	0x07A8
Conexant Systems Inc.	0x001C
Confidex	0x09FC
connectBlue AB	0x0071
Connected Yard, Inc.	0x02E7
ConnecteDevice Ltd.	0x0097
Conneqtech B.V.	0x0833
Connovate Technology Private Limited	0x0172
CONSORCIO TRUST CONTROL - NETTEL	0x0C6A
CONSTRUKTS, INC.	0x0C07
Consumer Sleep Solutions LLC	0x0570
Contec Medical Systems Co., Ltd.	0x063C
Continental Automotive Systems	0x004B
CONTRINEX S.A.	0x03CE
Control Solutions LLC	0x0C41
Control-J Pty Ltd	0x0472
Controlid Industria, Comercio de Hardware e Servicos de Tecnologia Ltda	0x0884
Convergence Systems Limited	0x04F8
CONVERTRONIX TECHNOLOGIES AND SERVICES LLP	0x0B57
CONWISE Technology Corporation Ltd	0x0042
CONZUMEX INDUSTRIES PRIVATE LIMITED	0x0B34
Cool Webthings Limited	0x01F5
Cooler Pro, LLC	0x0D2D
CORAL-TAIYI Co. Ltd.	0x0BED
Coravin, Inc.	0x0650
CORE CORPORATION	0x097A
Core Health and Fitness LLC	0x0830
CORE Lighting Ltd	0x0186
core sensing GmbH	0x0CF8
CORE TRANSPORT TECHNOLOGIES NZ LIMITED	0x0566
COREIOT PTY LTD	0x0719
CORE|vision BV	0x08B1

Coroflo Limited	0x0BDD
CoroWare Technologies, Inc	0x020C
CORROHM	0x0C18
Corsair	0x0A82
CORVENT MEDICAL, INC.	0x0CE2
Corvex Connected Safety	0x0771
Cosmed s.r.l.	0x0C10
Cosmicnode BV	0x0C36
CoSTAR TEchnologies	0x02FA
Countrymate Technology Limited	0x0964
Courtney Thorne Limited	0x033B
COWBELL ENGINEERING CO.,LTD.	0x08EA
COWBOY	0x05E8
Coyotta	0x09D7
CP Electronics Limited	0x048B
CPS AS	0x09E4
CRADERS,CO.,LTD	0x0AF1
Creative Technology Ltd.	0x0076
CRESCO Wireless, Inc.	0x0532
Crestron Electronics, Inc.	0x04BA
Cricut, Inc.	0x0792
CRONO CHIP, S.L.	0x07B5
Cronologics Corporation	0x037C
CRONUS ELECTRONICS LTD	0x0801
Crookwood	0x0635
Crosscan GmbH	0x087C
Crowd Connected Ltd	0x08E5
CrowdGlow Ltd	0x09C9
Crownstone B.V.	0x038E
CROXEL, INC.	0x0A14
Crystal Alarm AB	0x00FA
CSIRO	0x0A51
CSR Building Products Limited	0x04B9
CST ELECTRONICS (PROPRIETARY) LIMITED	0x079B
CTEK Sweden AB	0x097B
CUBE TECHNOLOGIES	0x03EE

CUBETECH s.r.o.	0x019B
Cucumber Lighting Controls Limited	0x0CB7
Cue	0x0777
Cumulus Digital Systems, Inc	0x08EF
Curie Point AB	0x0691
Currant, Inc.	0x029A
Current Lighting Solutions LLC	0x0897
CuteCircuit LTD	0x01ED
CV. NURI TEKNIK	0x0CED
CVS Health	0x019D
Cyber Transport Control GmbH	0x0776
CYBERDYNE Inc.	0x0C59
Cybex GmbH	0x078D
CycleLabs Solutions inc.	0x0466
CycLock	0x0D38
Cyclops Marine Ltd	0x0CCA
Cypress Semiconductor	0x0131
D&M Holdings Inc.	0x0531
D-Link Corp.	0x083F
Dai Nippon Printing Co., Ltd.	0x0255
DAIICHIKOSHO CO., LTD.	0x0A22
Dairy Tech, Inc.	0x0732
DaisyWorks, Inc	0x04EF
DAKATECH	0x085A
DALI Alliance	0x0AE4
Dallas Logic Corporation	0x04A7
Danfoss A/S	0x042F
Danlers Ltd	0x00E1
Darkglass Electronics Oy	0x08FB
Dash Robotics	0x02C0
DashLogic, Inc.	0x09AB
Data Sciences International	0x0BA0
Dataflow Systems Limited	0x059B
Datalogic S.r.l.	0x0D07
Datalogic USA, Inc.	0x0D08
DATAMARS, Inc.	0x0903

DATANG SEMICONDUCTOR TECHNOLOGY CO.,LTD	0x0A60
DDS, Inc.	0x0264
Deako	0x0C97
DECATHLON SE	0x0B18
Deco Enterprises, Inc.	0x0675
Deepfield Connect GmbH	0x0BE4
DEFA AS	0x027B
deister electronic GmbH	0x099C
DEKA Research & Development Corp.	0x026B
DEKRA TESTING AND CERTIFICATION, S.A.U.	0x0980
DELABIE	0x0A3D
DeLaval	0x043C
Delcom Products Inc.	0x06BF
Dell Computer Corporation	0x041E
DeLorme Publishing Company, Inc.	0x0080
Delphi Corporation	0x00FC
DelpSys, s.r.o.	0x0A8C
DELSEY SA	0x0422
Delta Cycle Corporation	0x0A75
Delta Development Team, Inc	0x0D2F
Delta Electronics, Inc.	0x069E
Delta Systems, Inc	0x02EC
Delta T Corporation	0x045C
Demant A/S	0x0107
DEN Smart Home B.V.	0x0C66
Dension Elektronikai Kft.	0x0871
Density Inc.	0x03D1
DENSO AIRCOOL CORPORATION	0x0C29
Denso Corporation	0x08EC
DENSO TEN Limited	0x010D
Derichs GmbH	0x0587
Dermal Photonics Corporation	0x08F6
Dermalapps, LLC	0x0684
Detect Blue Limited	0x051E
Deublin Company, LLC	0x09B0

DEV TECNOLOGIA INDUSTRIA, COMERCIO E MANUTENCAO DE EQUIPAMENTOS LTDA. - ME	0x0486
Devdata S.r.l.	0x030D
Develco Products A/S	0x046F
Devialet SA	0x0258
DeviceDrive AS	0x0782
Deviceworx	0x030E
DeVilbiss Healthcare LLC	0x0A1F
DeWalch Technologies, Inc.	0x02DC
DewertOkin GmbH	0x066B
Dexcom, Inc.	0x00D0
Diagnoptics Technologies	0x04B6
Dialog Semiconductor B.V.	0x00D2
Diamond Kinetics, Inc.	0x061E
DIAODIAO (Beijing) Technology Co., Ltd.	0x0749
DIC Corporation	0x0AA3
DIG Corporation	0x06CD
Digi International Inc (R)	0x02DB
Digianswer A/S	0x000C
Digibale Pty Ltd	0x079D
DIGISINE ENERGYTECH CO. LTD.	0x07F3
Digital Matter Pty Ltd	0x064F
DIM3	0x081B
Direct Communication Solutions, Inc.	0x07F9
DISCOVERY SOUND TECHNOLOGY, LLC	0x04A9
Dish Network LLC	0x0640
DiUS Computing Pty Ltd	0x0734
DiveNav, Inc.	0x0313
Divesoft s.r.o.	0x0BCB
DJO Global	0x01F6
Dmac Mobile Developments, LLC	0x076A
DME Microelectronics	0x01C4
Dmet Products Corp.	0x04C2
DML LLC	0x0742
DNANUDGE LIMITED	0x0847
Dodam Enersys Co., Ltd	0x0BFB

Dodge Industrial, Inc.	0x0B3C
Dolby Labs	0x0309
DOM Sicherheitstechnik GmbH & Co. KG	0x04CF
Dometic Corporation	0x0845
Domintell s.a.	0x0803
Domster Tadeusz Szydlowski	0x026C
DONGGUAN HELE ELECTRONICS CO., LTD	0x071E
Dongguan Liesheng Electronic Co.Ltd	0x071F
Dongguan SmartAction Technology Co.,Ltd.	0x06CC
Dongguan Yougo Electronics Co.,Ltd.	0x0CE8
donutrobotics Co., Ltd.	0x0A03
Dopple Technologies B.V.	0x0849
Doppler Lab	0x02AA
dormakaba Holding AG	0x0C64
DOTT Limited	0x0219
doubleO Co., Ltd.	0x0D06
Douglas Dynamics L.L.C.	0x0ADF
Douglas Lighting Controls Inc.	0x0911
Down Range Systems LLC	0x0840
DPTechnics	0x05F6
Draegerwerk AG & Co. KGaA	0x04BC
Dragonchip Limited	0x069B
Dragonfly Energy Corp.	0x0C9F
Drayson Technologies (Europe) Limited	0x0436
Dream Labs GmbH	0x06C4
DreamVisions co., Ltd.	0x02F7
Dreem SAS	0x0B94
Drekker Development Pty. Ltd.	0x0343
dricos, Inc.	0x096A
DSEA A/S	0x0082
Ducere Technologies Pvt Ltd	0x0312
Duke Manufacturing Co	0x0B2F
Duracell U.S. Operations Inc.	0x057B
Durag GmbH	0x0BD0
Duravit AG	0x0ADC
Dyeware, LLC	0x06CB

Dymo	0x0B6A
DYNAKODE TECHNOLOGY PRIVATE LIMITED	0x06D4
Dynamic Controls	0x0175
Dynamic Devices Ltd	0x01E5
Dynometrics Inc.	0x0480
DyOcean	0x049C
DYPHI	0x09B2
Dyson Technology Limited	0x0A12
e-moola.com Pty Ltd	0x07F0
E.G.O. Elektro-Geraetebau GmbH	0x0276
e.solutions	0x0115
EAGLE DETECTION SA	0x074E
EAGLE KINGDOM TECHNOLOGIES LIMITED	0x0AD1
EAR TEKNIK ISITME VE ODIOMETRI CIHAZLARI SANAYI VE TICARET ANONIM SIRKETI	0x09D6
Earda Technologies Co.,Ltd	0x0AFE
Eargo, Inc.	0x0329
Earlens Corporation	0x01AE
Easee AS	0x0C2E
Eaton Corporation	0x035C
Eberspaecher Climate Control Systems GmbH	0x0CB4
eBest IOT Inc.	0x0437
EC sense co., Ltd	0x0C1E
ECCEL CORPORATION SAS	0x0C9E
Eccrine Systems, Inc.	0x0690
ECCT	0x0A09
ECD Electronic Components GmbH Dresden	0x0807
Echoflex Solutions Inc.	0x0773
Eclipse (HQ Espana) S.L.	0x0035
ecobee Inc.	0x07D6
Ecolab Inc.	0x0BB0
Ecotest	0x0088
Edamic	0x021D
Eden Software Consultants Ltd.	0x00E5
Edifier International Limited	0x07E0
EDPS	0x051C

Eello LLC	0x0A9B
Eijkelkamp Soil & Water	0x02CC
EISST Ltd	0x0298
Ekomini inc.	0x027A
ELA Innovation	0x0757
ELAD srl	0x01D5
Elatec GmbH	0x0752
Elcometer Limited	0x00F6
Elecs Industry Co.,Ltd.	0x05B6
Electrocompaniet A.S.	0x0332
Electronic Design Lab	0x032A
Electronic Sensors, Inc.	0x0B45
Electronic Temperature Instruments Ltd	0x0376
Electronic Theatre Controls	0x095D
ELECTRONICA INTEGRAL DE SONIDO S.A.	0x0636
Electronics Tomorrow Limited	0x02C7
Electronics4All Inc.	0x0D1D
ElectronX design	0x0CFC
Elekon AG	0x0936
Element Products, Inc.	0x070B
Elemental Machines, Inc.	0x05E3
Eli Lilly and Company	0x0728
ELIAS GmbH	0x0294
Elics Basis Ltd.	0x0BD9
Elimo Engineering Ltd	0x09BA
Ellenby Technologies, Inc.	0x0AB4
EllieGrid	0x04E2
Ellisys	0x030A
ELPRO-BUCHS AG	0x0982
Elstat Electronics Ltd.	0x0AB5
Eltako GmbH	0x0683
EM Microelectronic-Marin SA	0x005A
Embecta Corp.	0x0C28
Embedded Devices Co. Company	0x089C
Embedded Electronic Solutions Ltd. dba e2Solutions	0x0385
Embedded Engineering Solutions LLC	0x0C75

Embedded Fitness B.V.	0x084F
Ember Technologies, Inc.	0x03C1
emberlight	0x0169
EMBR labs, INC	0x090B
Embrava Pty Ltd	0x0A1B
Emergency Lighting Products Limited	0x0865
Emerja Corporation	0x0C68
Emerson Digital Cold Chain, Inc.	0x016A
Emerson Electric Co.	0x04DF
Emlid Limited	0x0A7A
Emlid Tech Kft.	0x0CBB
Emotion Fitness GmbH & Co. KG	0x0B54
Empatica Srl	0x02D1
EMS Integrators, LLC	0x0B4B
Endress+Hauser	0x0245
Enequi AB	0x06FA
ENERGOUS CORPORATION	0x01A7
Energy Technology and Control Limited	0x0D05
Enerpac Tool Group Corp.	0x0B1B
Eneso Tecnologia de Adaptacion S.L.	0x08E6
Enflux Inc.	0x04CC
ENGAGENOW DATA SCIENCES PRIVATE LIMITED	0x09A2
Engineered Audio, LLC.	0x04DB
Engineered Medical Technologies	0x076B
Enlighted Inc	0x0335
EnOcean GmbH	0x03DA
EnPointe Fencing Pty Ltd	0x0888
Ensemble Tech Private Limited	0x0579
ENSESO LLC	0x093B
Ensto Oy	0x0628
Enterlab ApS	0x031D
EntWick Co.	0x0BC2
EPIC S.R.L.	0x07BB
Epic Systems Co., Ltd.	0x08A2
EPIFIT	0x0894
Epona Biotec Limited	0x07B9

Epsilon Electronics,Inc	0x0C47
EQOM SSC B.V.	0x0CD2
Equinosis, LLC	0x0C3A
Equinux AG	0x0086
ER Lab LLC	0x0BF4
Eran Financial Services LLC	0x0A25
Ergodriven Inc	0x0CFF
ERi, Inc	0x010B
Ericsson AB	0x0000
ERM Electronic Systems LTD	0x04AE
EROAD	0x01A3
ESCEA LIMITED	0x0C52
ESEMBER LIMITED LIABILITY COMPANY	0x0783
eSenseLab LTD	0x081F
Esmé Solutions	0x0BFD
Espressif Systems (Shanghai) Co., Ltd.	0x02E5
Esrille Inc.	0x03A8
ESS Embedded System Solutions Inc.	0x06FD
essentim GmbH	0x05DD
Essex Electronics	0x0327
Essity Hygiene and Health Aktiebolag	0x0707
Estimote, Inc.	0x015D
ESTOM Infotech Kft.	0x08D0
ESYLUX	0x032B
ETA SA	0x0231
ETABLISSEMENTS GEORGES RENAULT	0x07B7
eTactica ehf	0x0999
Etekcity Corporation	0x06D0
Etesian Technologies LLC	0x0341
ETHEORY PTY LTD	0x0BBD
Etymotic Research, Inc.	0x0838
Eugster Frismag AG	0x0319
Eurotronik Kranj d.o.o.	0x066E
Eve Systems GmbH	0x00CE
Everykey Inc.	0x0174
Evident Corporation	0x0CAE

Evluma	0x00C9
EVVA Sicherheitstechnologie GmbH	0x0869
Exeger Operations AB	0x0C33
EXEO TECH CORPORATION	0x08A1
EXFO, Inc.	0x052D
Exon Sp. z o.o.	0x03AA
exoTIC Systems	0x071D
Expai Solutions Private Limited	0x0676
Expain AS	0x0375
Exponential Power, Inc.	0x0B5C
Extron Design Services	0x018D
Eyefi, Inc.	0x031E
F5 Sports, Inc	0x071C
Fabtronics Australia Pty Ltd	0x0447
Fanstel Corp	0x0634
Fantini Cosmi s.p.a.	0x073B
Farm Jenny LLC	0x05D8
FarSite Communications Limited	0x0478
Fasetto, Inc.	0x0C14
Fathom Systems Inc.	0x0463
Fatigue Science	0x0417
Fauna Audio GmbH	0x0976
Favero Electronics Srl	0x0364
FAZEPRO LLC	0x0AA4
FAZUA GmbH	0x0B06
FDK CORPORATION	0x0191
FedEx Services	0x0141
Feedback Sports LLC	0x0983
Fender Musical Instruments	0x0410
FengFan (BeiJing) Technology Co, Ltd	0x0234
FESTINA LOTUS SA	0x0D1E
Fetch My Pet	0x01CB
ffly4u	0x03E5
FIAMM	0x01A1
FIBRO GmbH	0x0514
Fidure Corp.	0x0C6D

FIELD DESIGN INC.	0x0B78
FiftyThree Inc.	0x0247
Finch Technologies Ltd.	0x0780
Finder S.p.A.	0x0561
FINSECUR	0x03D7
FIOR & GENTZ	0x06CE
Fireflies Systems	0x018F
First Design System Inc.	0x0AF8
First Light Technologies Ltd.	0x0947
Fisher & Paykel Healthcare	0x059F
Fitbit, Inc.	0x018E
Five Interactive, LLC dba Zendo	0x025B
FiveCo Sarl	0x070E
Fjorden Electra AS	0x0BB2
Flaircomm Microelectronics Inc.	0x0B00
Flender GmbH	0x0BB3
FLEURBAEY BVBA	0x026E
Flexoptix GmbH	0x0AC5
Flextronics International USA Inc.	0x0813
Fliegl Agrartechnik GmbH	0x02D9
FlightSafety International	0x01AD
Flint Rehabilitation Devices, LLC	0x02DD
Flipnavi Co.,Ltd.	0x056A
FLIR Systems AB	0x0AE9
Flosonics Medical	0x0A04
FlowMotion Technologies AS	0x069F
Flowscape AB	0x03F3
Fluke Corporation	0x025E
FMW electronic Futterer u. Maier-Wolf OHG	0x0605
Focus fleet and fuel management inc	0x0427
Focus Ingenieria SRL	0x0A68
Focus Systems Corporation	0x0139
Foil, Inc.	0x0A98
Follow Sense Europe B.V.	0x0A52
foolography GmbH	0x03EF
Footmarks	0x0516

Force Impact Technologies	0x0769
Forciot Oy	0x0620
Ford Motor Company	0x0723
Form Athletica Inc.	0x067D
Form Lifting, LLC	0x01FB
Fortiori Design LLC	0x0631
FORTRONIK storitve d.o.o.	0x054E
Forward Thinking Systems LLC.	0x0CBF
Foshan Viomi Electrical Technology Co., Ltd	0x0C21
Foster Electric Company, Ltd	0x0230
Foundation Engineering LLC	0x050F
FoundersLane GmbH	0x0B7D
Fourth Evolution Inc	0x0603
Foxble, LLC	0x0831
Fracarro Radioindustrie SRL	0x058C
FRAGRANCE DELIVERY TECHNOLOGIES LTD	0x0843
Franceschi Marina snc	0x04DA
FRANKLIN TECHNOLOGY INC	0x055B
Franz Kaldewei GmbH&Co KG	0x0AD8
Fraunhofer IIS	0x08A9
Frecce LLC	0x07EC
FREDERIQUE CONSTANT SA	0x03B9
Free2move AB	0x0053
Freedman Electronics Pty Ltd	0x0A7D
Freedom Innovations	0x01E4
FREELAP SA	0x0363
Freescale Semiconductor, Inc.	0x01FF
Freshtemp	0x00E6
Fresnel Technologies, Inc.	0x0BE7
Friday Home Aps	0x09E3
Friday Labs Limited	0x041A
frogblue TECHNOLOGY GmbH	0x05D2
Frontiergadget, Inc.	0x0534
Frost Solutions, LLC	0x0D3A
FUBA Automotive Electronics GmbH	0x06D7
Fugoo, Inc.	0x0101

FUJI INDUSTRIAL CO.,LTD.	0x0307
Fuji Xerox Co., Ltd	0x05ED
Fujian Newland Auto-ID Tech. Co., Ltd.	0x0B5D
FUJIFILM Corporation	0x04D8
FUJIMIC NIIGATA, INC.	0x078E
FUJITSU COMPONENT LIMITED	0x0D28
Fujitsu Limited	0x02EA
Fullpower Technologies, Inc.	0x01EF
FUN FACTORY GmbH	0x0B51
Funai Electric Co., Ltd.	0x0090
Fundacion Tecnalia Research and Innovation	0x0924
FUSEAWARE LIMITED	0x0AFF
FUTEK ADVANCED SENSOR TECHNOLOGY, INC	0x0AEC
G-wearables inc.	0x01D6
G24 Power Limited	0x0256
GA	0x0971
Galileo Technology Limited	0x0A3B
Gallagher Group	0x03C9
Gantner Electronic GmbH	0x0403
Garage Smart, Inc.	0x0509
Garmin International, Inc.	0x0087
Garnet Instruments Ltd.	0x0CC0
GASTEC CORPORATION	0x0795
GB Solution co.,Ltd	0x088C
GCT Semiconductor	0x002D
GD Midea Air-Conditioning Equipment Co., Ltd.	0x06A8
GEAR RADIO ELECTRONICS CORP.	0x09D5
Geberit International AG	0x0602
Gecko Health Innovations, Inc.	0x0181
Geeknet, Inc.	0x0B72
Geeksme S.L.	0x07E4
Gelliner Limited	0x01F7
GeLo Inc	0x00C8
Gema Switzerland GmbH	0x0670
Gemalto	0x026A
Gemstone Lights Canada Ltd.	0x0C95

GEMU	0x0C1C
Genedrive Diagnostics Ltd	0x07BD
Geneq Inc.	0x00C2
General Electric Company	0x01B7
General Luminaire (Shanghai) Co., Ltd.	0x0841
General Motors	0x0068
Genevac Ltd	0x02BC
Gennum Corporation	0x003B
Gentex Corporation	0x0B47
Gentle Energy Corp.	0x0B8E
Geoforce Inc.	0x009D
Geopal system A/S	0x0A64
Geophysical Technology Inc.	0x01AA
Georg Fischer AG	0x0692
Geosatis SA	0x052C
Geotab	0x0275
GERTEC BRASIL LTDA.	0x0342
Geva Sol B.V.	0x0C15
GEWISS S.p.A.	0x0A40
Giatec Scientific Inc.	0x0301
Gibson Guitars	0x0062
GIGA-TMS INC	0x088E
GigaDevice Semiconductor Inc.	0x0C2B
GIGALANE.CO.,LTD	0x01A2
Gigaset Communications GmbH	0x0180
Gill Electronics	0x01D2
GILSON SAS	0x0C6B
Gilvader	0x02DA
Gimbal Inc.	0x008C
Gimer medical	0x0895
GimmiSys GmbH	0x094C
GiP Innovation Tools GmbH	0x0637
GiPStech S.r.l.	0x0A93
Gira Giersiepen GmbH & Co. KG	0x0584
GISMAN	0x0B9B
GISTIC	0x0336

GL Solutions K.K.	0x0962
Glacial Ridge Technologies	0x0262
Glamo Inc.	0x0C22
Glass Security Pte Ltd	0x0738
Glenview Software Corporation	0x077F
GlobalMed	0x0AE3
Globalstar, Inc.	0x0576
Globalworx GmbH	0x06A2
Globe (Jiangsu) Co., Ltd	0x0945
GLOWFORGE INC.	0x0BA8
GLP German Light Products GmbH	0x0AEF
GN Audio A/S	0x0067
GN Hearing A/S	0x0089
GoerTek Dynaudio Co., Ltd.	0x05AC
Goodnet, Ltd	0x021E
Gooee Limited	0x04D5
Google	0x00E0
Gooligum Technologies Pty Ltd	0x0926
GOOOLED S.R.L.	0x04CE
GoPro, Inc.	0x02F2
Gordon Murray Design Limited	0x0C11
Gozio Inc.	0x01FA
GPSI Group Pty Ltd	0x0128
Graesslin GmbH	0x076D
Grand Centrix GmbH	0x0448
Grandex International Corporation	0x0BAB
Granite River Solutions, Inc.	0x07AB
Granwin IoT Technology (Guangzhou) Co.,Ltd	0x0C46
Grape Systems Inc.	0x0142
Great Dane LLC	0x0D11
GREE Electric Appliances, Inc. of Zhuhai	0x0D23
Green Throttle Games	0x00AC
Greennote Inc,	0x0A84
greenTEG AG	0x0BF6
Greenwald Industries	0x0685
Gremsy JSC	0x0A63

Grob Technologies, LLC	0x03DF
Grote Industries	0x05C2
Group Lotus Limited	0x0B9F
Group Sense Ltd.	0x0073
Grundfos A/S	0x0328
GS TAG	0x05F5
GT-tronics HK Ltd	0x04A3
GuangDong Oppo Mobile Telecommunications Corp., Ltd.	0x079A
Guangzhou FiiO Electronics Technology Co.,Ltd	0x04A5
GuangZhou KuGou Computer Technology Co.Ltd	0x0748
Guangzhou SuperSound Information Technology Co.,Ltd	0x0724
Guard RFID Solutions Inc.	0x0B16
Guardtec, Inc.	0x04E0
Guide ID B.V.	0x096B
Guilin Zhishen Information Technology Co.,Ltd.	0x085D
Guillemot Corporation	0x02C2
Gunakar Private Limited	0x0696
Gunwerks, LLC	0x096D
GV Concepts Inc.	0x07B0
GWA Hygiene GmbH	0x072C
Gycom Svenska AB	0x05EC
Gymstory B.V.	0x0B98
H G M Automotive Electronics, Inc.	0x0B55
H+B Hightech GmbH	0x0C96
H.P. Shelby Manufacturing, LLC.	0x0B5A
HabitAware, LLC	0x027E
Hach - Danaher	0x0693
Hager	0x0506
Hagleitner Hygiene International GmbH	0x05F9
HAINBUCH GMBH SPANNENDE TECHNIK	0x0A8A
Hala Systems, Inc.	0x0B32
Hamilton Professional Services of Canada Incorporated	0x0750
HANA Micron	0x01B9
Hangzhou BroadLink Technology Co., Ltd.	0x0B93
Hangzhou iMagic Technology Co., Ltd	0x0524
Hangzhou Tuya Information Technology Co., Ltd	0x07D0

Hangzhou Yaguan Technology Co. LTD	0x09F9
Hanlynn Technologies	0x007B
Hanna Instruments, Inc.	0x078F
Hans Dinslage GmbH	0x0613
HANSHIN ELECTRIC RAILWAY CO.,LTD.	0x02B5
HAPPIEST BABY, INC.	0x0A69
Happy Health, Inc.	0x0C04
happybrush GmbH	0x06F9
HARADA INDUSTRY CO., LTD.	0x0B73
Harbortronics, Inc.	0x04AB
Hardcoder Oy	0x0B7B
HARMAN CO.,LTD.	0x075A
Harman International Industries, Inc.	0x0057
HASWARE Inc.	0x01C6
Hatch Baby, Inc.	0x0434
Havells India Limited	0x0B40
HAYWARD INDUSTRIES, INC.	0x0CEA
Healthwear Technologies (Changzhou)Ltd	0x0326
Hearing Lab Technology	0x0585
HeartHero, inc.	0x09D3
Heartland Payment Systems	0x034F
hearX Group (Pty) Ltd	0x0BA7
Heath Consultants Inc.	0x0C42
Heavys Inc	0x0C8B
Hefei Yunlian Semiconductor Co., Ltd	0x0A3E
Hekatron Vertriebs GmbH	0x055E
Helios Sports, Inc.	0x0855
Hello Inc.	0x03EA
Helvar Ltd	0x0438
HENDON SEMICONDUCTORS PTY LTD	0x058F
Henway Technologies, LTD.	0x0938
Herbert Waldmann GmbH & Co. KG	0x04A4
HerdDogg, Inc	0x0959
Hero Workout GmbH	0x0940
HERUTU ELECTRONICS CORPORATION	0x0CAB
Hestan Smart Cooking Inc.	0x03F1

Hewlett Packard Enterprise	0x011B
HEXAGON METROLOGY DIVISION ROMER	0x0829
Hexology	0x0AE6
HHO (Hangzhou) Digital Technology Co., Ltd.	0x0CD6
HID Global	0x0124
Hill-Rom	0x08FC
Hilti AG	0x030C
HIMSA II K/S	0x0BBF
Hiotech AB	0x0218
HiSilicon Technologies CO., LIMITED	0x010F
Hitachi Ltd	0x0029
HITIQ LIMITED	0x0740
HitSeed Oy	0x06BE
HiViz Lighting, Inc.	0x0C54
HLI Solutions Inc.	0x06DF
HLP Controls Pty Limited	0x0786
HM Electronics, Inc.	0x034C
HMD Global Oy	0x0CC3
HMS Industrial Networks AB	0x06AB
Hoffmann SE	0x08A3
Holman Industries	0x0374
HoloKit, Inc.	0x0798
Honda Lock Mfg. Co.,Ltd.	0x0B0E
Honda Motor Co., Ltd.	0x0915
Honeywell International Inc.	0x0526
Hong Kong Bouffalo Lab Limited	0x07AF
HONGKONG NANO IC TECHNOLOGIES CO., LIMITED	0x0525
Hongkong OnMicro Electronics Limited	0x01BF
Honor Device Co., Ltd.	0x09C6
hoots classic GmbH	0x07D5
HOP Ubiquitous	0x0182
HORIBA, Ltd.	0x0C40
Hormann KG Antriebstechnik	0x07B4
Hosiden Corporation	0x00DD
Houston Radar LLC	0x06EB
HOUWA SYSTEM DESIGN, k.k.	0x01CE

HP, Inc.	0x0065
HQ Inc	0x031B
HTC Corporation	0x02ED
Huami (Shanghai) Culture Communication CO., LTD	0x022F
HUAWEI Technologies Co., Ltd.	0x027D
Hubei Yuan Times Technology Co., Ltd.	0x0BD1
Huf Hülsbeck & Fürst GmbH & Co. KG	0x070A
Hug Technology Ltd	0x066F
Hugo Muller GmbH & Co KG	0x0632
HUIZHOU DESAY SV AUTOMOTIVE CO., LTD.	0x014D
Human, Incorporated	0x05E1
HungYi Microelectronics Co.,Ltd.	0x09C5
Hunter Douglas Inc	0x0819
Huso, INC	0x0BBA
Husqvarna AB	0x0426
Hx Engineering, LLC	0x09CB
Hydro-Gear Limited Partnership	0x0887
Hygiene IQ, LLC.	0x0B22
Hyginex, Inc.	0x02B4
Hykso Inc.	0x0C58
HYPER ICE, INC.	0x08BA
Hyundai Motor Company	0x0826
Häfele GmbH & Co KG	0x07E9
i+D3 S.L.	0x01B8
i-developer IT Beratung UG	0x0400
I-PERCUT	0x0B04
i-SENS, inc.	0x089E
I-SYST inc.	0x0177
I.FARM, INC.	0x067B
i.Tech Dynamic Global Distribution Ltd.	0x0099
IACA electronique	0x0303
iaconicDesign Inc.	0x07C7
IAI Corporation	0x0521
iApartment co., ltd.	0x0474
IBA Dosimetry GmbH	0x0970
IBM Corp.	0x0003

iCOGNIZE GmbH	0x06B7
Icom inc.	0x0475
Icon Health and Fitness	0x01A5
iconmobile GmbH	0x05E9
ICP Systems B.V.	0x0B4E
ICU tech GmbH	0x0B7F
IDEC	0x0BD2
Identiv, Inc.	0x0263
iDesign s.r.l.	0x0470
IDIBAIX enginneering	0x0718
IF, LLC	0x028D
ifLink Open Community	0x09AF
ifly	0x08CD
Igarashi Engineering	0x0489
igloohome	0x05BA
Iguanavation, Inc.	0x0733
IK Multimedia Production srl	0x0214
ikeGPS	0x0210
ILLUMAGEAR, Inc.	0x0B2C
Illusory Studios LLC	0x074A
Illuxtron international B.V.	0x02A7
iLOQ Oy	0x064D
iLumi Solutions Inc.	0x03BF
imagiLabs AB	0x0880
IMAGINATION TECHNOLOGIES LTD	0x02F9
Imagine Marketing Limited	0x0CD1
IMATRIX SYSTEMS, INC.	0x0AE2
IMI Hydronic Engineering International SA	0x08ED
iMicroMed Incorporated	0x042B
Imostar Technologies Inc.	0x0C50
Impact Biosystems, Inc.	0x0B3A
Impossible Camera GmbH	0x02A0
In2things Automation Pvt. Ltd.	0x03CA
INCITAT ENVIRONNEMENT	0x0B43
Incotex Co. Ltd.	0x0A3A
INCUS PERFORMANCE LTD.	0x082D

Indagem Tech LLC	0x02F5
Indigo Diabetes	0x0A58
indoormap	0x032E
InDreamer Techsol Private Limited	0x04F2
Industrial Network Controls, LLC	0x06DC
INEO ENERGY& SYSTEMS	0x05E5
INEO-SENSE	0x0914
Ineos Automotive Limited	0x0B90
Inexess Technology Simma KG	0x0299
Infineon Technologies AG	0x0009
Infinitegra, Inc.	0x0BAA
iNFORM Technology GmbH	0x081E
INFOTECH s.r.o.	0x0390
Ingchips Technology Co., Ltd.	0x06AC
Ingenieur-Systemgruppe Zahn GmbH	0x00AB
Ingenieurbuero Birnfeld UG (haftungsbeschraenkt)	0x0892
INGICS TECHNOLOGY CO., LTD.	0x082C
Ingy B.V.	0x080C
INIA	0x05AD
Inmite s.r.o.	0x0158
inMusic Brands, Inc	0x00E3
Innblue Consulting	0x01DB
INNER RANGE PTY. LTD.	0x0AB3
Innocent Technology Co., Ltd.	0x0CC9
InnoCon Medical ApS	0x0770
Innohome Oy	0x0A73
Innokind, Inc.	0x091D
Innolux Corporation	0x0B63
Innophase Incorporated	0x0873
Innoseis	0x05FD
Innova Ideas Limited	0x0673
INNOVA S.R.L.	0x0C51
Innovacionnye Resheniya	0x0BF8
INNOVAG PTY. LTD.	0x0BB8
InnovaSea Systems Inc.	0x06AD
Innovation First, Inc.	0x0677

Innovative Design Labs Inc.	0x0A5C
Innovative Yachtter Solutions	0x0106
Innoware Development AB	0x09DD
Inor Process AB	0x0595
INOVA Geophysical, Inc.	0x0821
Inovonics Corp	0x08D7
INPEAK S.C.	0x0A1C
InPlay, Inc.	0x0505
inQs Co., Ltd.	0x0686
INSIGMA INC.	0x046A
Insta GmbH	0x04C6
Instabeat, Inc	0x03DB
instagrid GmbH	0x08F8
Instamic, Inc.	0x0A2F
Instinct Performance	0x057D
Insulet Corporation	0x0360
Integra Optics Inc	0x08C6
Integral Memroy Plc	0x0575
Integrated Silicon Solution Taiwan, Inc.	0x0041
Integrated System Solution Corp.	0x0039
Intel Corp.	0x0002
Intelletto Technologies Inc.	0x0190
Intelligenceworks Inc.	0x08A6
Intellithings Ltd.	0x06DD
Intemo Technologies	0x02F6
INTER ACTION Corporation	0x0615
Interactio	0x04F9
Intermotive,Inc.	0x0832
International Forte Group LLC	0x0465
Interplan Co., Ltd	0x0212
Intricon	0x03C6
Intuity Medical	0x0A7F
Inugo Systems Limited	0x0A55
Inuheat Group AB	0x04B4
Inventas AS	0x0ABD
Inventel	0x001E

InventureTrack Systems	0x02A1
InvisionHeart Inc.	0x0209
InVue Security Products Inc	0x0AB1
IONA Tech LLC	0x0BB7
IONIQ Skincare GmbH & Co. KG	0x08B3
iopool s.a.	0x074C
IORA Technology Development Ltd. Sti.	0x0B02
IoSA	0x0C12
IoT Instruments Oy	0x03E6
IOT Invent GmbH	0x090D
IOT Pot India Private Limited	0x03D2
Iotera Inc	0x0244
IOTOOLS	0x0B13
IOTTIVE (OPC) PRIVATE LIMITED	0x04DC
iParking Ltd.	0x01DC
IPextreme, Inc.	0x003D
iProtoXi Oy	0x0441
IPS Group Inc.	0x01E7
IQAir AG	0x060A
iQsquare BV	0x0717
Irdeto	0x0AF7
iRhythm Technologies, Inc.	0x0B23
iRiding(Xiamen)Technology Co.,Ltd.	0x0352
IRIS OHYAMA CO.,LTD.	0x08DF
iRobot Corporation	0x0600
ise Individuelle Software und Elektronik GmbH	0x0ACB
ISEMAR S.R.L.	0x097F
ISEO Serrature S.p.a.	0x0B3E
ista International GmbH	0x0A9F
iSwip	0x07B8
ITEC corporation	0x0280
Iton Technology Corp.	0x03F6
Itron, Inc.	0x01F2
Itude	0x02A3
ITZ Innovations- und Technologiezentrum GmbH	0x0652
IVT Wireless Limited	0x03A0

IZITHERM	0x0592
J Neades Ltd	0x06ED
J&M Corporation	0x0052
J-J.A.D.E. Enterprise LLC	0x089D
J. Wagner GmbH	0x08C5
Jaguar Land Rover Limited	0x020B
James Walker RotaBolt Limited	0x0930
Jana Care Inc.	0x040B
janova GmbH	0x0CB3
Japan Display Inc.	0x0D24
JAPAN TOBACCO INC.	0x09C3
Jawbone	0x008A
JBX Designs Inc.	0x0704
JCM TECHNOLOGIES S.A.	0x0A8D
JCT Healthcare Pty Ltd	0x06D6
JDRF Electromag Engineering Inc	0x0B70
JEPICO Corporation	0x093F
JetBeep Inc.	0x068D
Jetro AS	0x028A
Jewelbots	0x0321
Jiangsu Qinheng Co., Ltd.	0x0739
Jiangsu Teranovo Tech Co., Ltd.	0x068B
Jiangsu Toppower Automotive Electronics Co., Ltd.	0x009B
Jiangxi Innotech Technology Co., Ltd	0x0A20
Jigowatts Inc.	0x03EC
JIN CO, Ltd	0x0239
JLD Technology Solutions, LLC	0x09DE
JLG Industries, Inc.	0x0753
JMR embedded systems GmbH	0x072A
John Deere	0x0606
Johnson Controls, Inc.	0x00B9
Johnson Health Tech NA	0x07C4
Johnson Outdoors Inc	0x0278
Jolla Ltd	0x01E1
Jolly Logic, LLC	0x00ED
Joovv, Inc.	0x08F0

Joule IQ, INC.	0x07ED
JRC Mobility Inc.	0x0A48
JRM Group Limited	0x068F
JSB TECH PTE LTD	0x0923
JSK CO., LTD.	0x07FD
JT INNOVATIONS LIMITED	0x08CB
JUJU JOINTS CANADA CORP.	0x0848
Julbo	0x0954
Julius Blum GmbH	0x09CE
Jumo GmbH & Co. KG	0x0A72
June Life, Inc.	0x07C5
Jungheinrich Aktiengesellschaft	0x058D
JURA Elektroapparate AG	0x0C25
JUSTMORPH PTE. LTD.	0x0A66
JVC KENWOOD Corporation	0x0D10
Kabushikigaisha HANERON	0x09E7
KAHA PTE. LTD.	0x0921
Kano Computing Limited	0x07D4
Kapsch TrafficCom AB	0x0388
Kartographers Technologies Pvt. Ltd.	0x04B1
Katerra Inc.	0x075E
Kawantech	0x00D4
Kayamatics Limited	0x08AD
KC Technology Inc.	0x0016
KCCS Mobile Engineering Co., Ltd.	0x0ABC
KD CIRCUITS LLC	0x07BC
KEAN ELECTRONICS PTY LTD	0x09EB
KEBA Energy Automation GmbH	0x0C60
KEBA Handover Automation GmbH	0x0A7E
Keep Technologies, Inc.	0x09FD
KEEPEN	0x0D01
Keepin Co., Ltd.	0x0AC8
Keiser Corporation	0x0102
Kemppi Oy	0x0203
Kensington Computer Products Group	0x00A0
Kent Displays Inc.	0x00F3

Kenzen, Inc.	0x0AC3
Kerlink	0x0956
Kesseböhmer Ergonomietechnik GmbH	0x0C92
Ketronixs Sdn Bhd	0x08FE
KEYes	0x08D5
Keynes Controls Ltd	0x052A
KeySafe-Cloud	0x0608
KEYTEC,Inc.	0x0C23
KHN Solutions LLC	0x09A8
Kickmaker	0x0827
KIDO SPORTS CO., LTD.	0x0BF0
KidzTek LLC	0x07EE
Kiiroo BV	0x05A5
Kimberly-Clark	0x03FC
Kindeva Drug Delivery L.P.	0x094B
KINDOO LLP	0x0C31
King I Electronics.Co.,Ltd	0x06C3
Kinsa, Inc	0x0123
KiteSpring Inc.	0x0934
KKM COMPANY LIMITED	0x0A53
Klipsch Group, Inc.	0x07FA
KloudNation	0x01F0
Knick Elektronische Messgeraete GmbH & Co. KG	0x0548
KOAMTAC INC.	0x0778
KOBATA GAUGE MFG. CO., LTD.	0x0ACE
Kobian Canada Inc.	0x0445
Kocomojo, LLC	0x0173
Kodimo Technologies Company Limited	0x08F4
Koha.,Co.Ltd	0x02BB
Kohler Company	0x0594
Kohler Mira Limited	0x038A
Koizumi Lighting Technology corp.	0x0BE0
Koki Holdings Co., Ltd.	0x0695
Kolibree	0x0460
Komatsu Ltd.	0x0B9C
Komfort IQ, Inc.	0x07E7

KOMPAN A/S	0x0790
Konami Sports Life Co., Ltd.	0x05FA
Konftel AB	0x087D
Konica Minolta, Inc.	0x018B
Koninklijke Philips N.V.	0x01DD
Kontakt Micro-Location Sp. z o.o.	0x01FD
Kopi	0x0672
Kopin Corporation	0x041F
Kord Defence Pty Ltd	0x0CCC
Kosi Limited	0x04F0
KOUKAAM a.s.	0x00FB
Koya Medical, Inc.	0x099F
KOZO KEIKAKU ENGINEERING Inc.	0x08E1
Krog Systems LLC	0x085E
KROHNE Messtechnik GmbH	0x0555
Kromek Group Plc	0x063B
Kronos Incorporated	0x0383
KRUXWorks Technologies Private Limited	0x064E
KS Technologies	0x00E7
KTS GmbH	0x04D1
KUMHO ELECTRICS, INC	0x09A4
Kupson spol. s r.o.	0x029E
KUUKANJYOKIN Co.,Ltd.	0x0A6D
Kynesim Ltd	0x0468
KYS	0x035D
L.S. Research, Inc.	0x00E4
Lab Sensor Solutions	0x031C
LaceClips llc	0x0A5E
Laerdal Medical AS	0x01CA
Laird Connectivity LLC	0x0077
LAMPLIGHT Co., Ltd.	0x05D4
LAONZ Co.,Ltd	0x0866
LAPIS Semiconductor Co.,Ltd	0x0179
Lautsprecher Teufel GmbH	0x0AD2
LAVAZZA S.p.A.	0x0393
Laxmi Therapeutic Devices, Inc.	0x0D30

Lazlo326, LLC.	0x0599
LDL TECHNOLOGY	0x063F
Leaftronix Analogic Solutions Private Limited	0x06BB
LECO Corporation	0x0810
Lectronix, Inc.	0x01E2
LED Smart Inc.	0x0C06
Ledlenser GmbH & Co. KG	0x0654
LEDVANCE GmbH	0x052E
Ledworks S.r.l.	0x0BDC
Leggett & Platt, Incorporated	0x092D
LEGIC Identsystems AG	0x0A5B
LEGO System A/S	0x0397
LEGRAND	0x0586
Leica Camera AG	0x051A
Leica Geosystems AG	0x0D09
Lely	0x055C
Lenovo (Singapore) Pte Ltd.	0x02C5
lesswire AG	0x0079
Letsense s.r.l.	0x0340
Leupold & Stevens, Inc.	0x0AF0
LEVEL, s.r.o.	0x0AE8
Leviton Mfg. Co., Inc.	0x05BC
LEVOLOR INC	0x0885
Lexmark International Inc.	0x025D
LG Electronics	0x00C4
Libratone A/S	0x034B
Lichtvision Engineering GmbH	0x09FE
Lierda Science & Technology Group Co., Ltd.	0x02FE
Life Laboratory Inc.	0x0306
LifeBEAM Technologies	0x0227
LifePlus, Inc.	0x0A9E
LifeScan Inc	0x016D
LifeStyle Lock, LLC	0x044C
Lighting Science Group Corp.	0x0573
Lightning Protection International Pty Ltd	0x0414
Lightricity Ltd	0x0A96

lilbit ODM AS	0x0B71
LIMBOID LLC	0x0D1C
Limited Liability Company "Mikrotikls"	0x094F
limited liability company "Red"	0x0C08
LIMNO Co. Ltd.	0x06A4
LINAK A/S	0x00A4
LINCOGN TECHNOLOGY CO. LIMITED	0x0AA1
Lindab AB	0x05D1
Lindinvent AB	0x08C2
LINE Corporation	0x02C1
Linear Circuits	0x07DD
Link Labs, Inc.	0x0A1A
LinkedSemi Microelectronics (Xiamen) Co., Ltd	0x093A
LINKIO SAS	0x04AA
LINKSYS USA, INC.	0x0BEE
Linkura AB	0x0961
Linough Inc.	0x054A
Lintech GmbH	0x0144
Lippert Components, INC	0x05C7
Lismore Instruments Limited	0x095B
Listen Technologies Corporation	0x09FA
Liteboxer Technologies Inc.	0x08C8
Littelfuse	0x03FE
littleBits	0x0369
Livanova USA, Inc.	0x0669
LIVNEX Co.,Ltd.	0x07D3
LIXIL Corporation	0x0A0F
LL Tec Group LLC	0x0BCF
LLC "MEGA-F service"	0x0380
LLC Navitek	0x0737
LM Technologies Ltd	0x01B6
LMT Mercer Group, Inc	0x0495
Lockn Technologies Private Limited	0x0A4D
Lockswitch Sdn Bhd	0x0C5A
Locoroll, Inc	0x0503
Locus Positioning	0x0345

LOGICDATA Electronic & Software Entwicklungs GmbH	0x0547
LogiLube, LLC	0x095C
LogiLube, LLC	0x0953
Logitech International SA	0x01DA
LogTag North America Inc.	0x0AB7
Lone Star Marine Pty Ltd	0x0D3B
Long Range Systems, LLC	0x056C
Loomanet, Inc.	0x0C02
Loop Devices, Inc	0x0302
Loopshore Oy	0x0779
Louis Vuitton	0x0A26
LoupeDeck Oy	0x07AC
Loy Tec electronics GmbH	0x0AA0
LSI ADL Technology	0x0270
Lucent	0x0007
LucentWear LLC	0x05CB
Lucie Labs	0x07E1
Lucimed	0x0901
Ludus Helsinki Ltd.	0x0084
LUGLOC LLC	0x04D6
Luidia Inc	0x0411
Lukoton Experience Oy	0x0215
lulabytes S.L.	0x037E
Lumen UAB	0x0529
Lumenetix, Inc	0x0459
LumenRadio AB	0x09E9
Lumens For Less, Inc	0x0756
Lumi United Technology Co., Ltd	0x0B27
LumiGeek LLC	0x0208
LUMINOAH, INC.	0x0D3E
Luminostics, Inc.	0x091B
Lumo Bodytech Inc.	0x0251
Lumos Health Inc.	0x0985
Luna Health, Inc.	0x0BEB
Luna XIO, Inc.	0x0736
Lunatico Astronomia SL	0x062A

Lund Motion Products, Inc.	0x096F
Lunera Lighting Inc.	0x0528
Lupine	0x022D
Luster Leaf Products Inc	0x021F
Lutron Electronics Co., Inc.	0x04DE
Luxer Corporation	0x0A34
LVI Co.	0x0C1F
LX SOLUTIONS PTY LIMITED	0x0638
Lynxemi Pte Ltd	0x0493
LYS TECHNOLOGIES LTD	0x0581
Lytx, INC.	0x0A65
M-Way Solutions GmbH	0x024D
MAC SRL	0x0741
Machfu Inc.	0x0BAC
Macnica Inc.	0x020A
Macrogiga Electronics	0x059C
Macronix International Co. Ltd.	0x002C
MadgeTech, Inc	0x0CEE
MADS Inc	0x0132
MADSGlobalNZ Ltd.	0x0162
Magnitude Lighting Converters	0x030B
MagniWare Ltd.	0x0358
Magnus Technology Sdn Bhd	0x09DF
Mahr GmbH	0x06FE
MAINBOT	0x0B2B
makita corporation	0x0643
MakuSafe Corp	0x0D03
Mammut Sports Group AG	0x0B82
MAMORIO.inc	0x0518
Mannkind Corporation	0x0680
Mansella Ltd	0x0021
Mantis Tech LLC	0x0761
Mantracourt Electronics Limited	0x04C3
Manus Machina BV	0x0220
Map Large, Inc.	0x0A4A
MAQUET GmbH	0x0CA3

MARELLI EUROPE S.P.A.	0x00A9
Marquardt GmbH	0x0B05
Marvell Technology Group Ltd.	0x0048
Masbando GmbH	0x05FC
Masimo Corp	0x0243
Masonite Corporation	0x09E6
Master Lock	0x014B
Matrix Inc.	0x035B
Mattel	0x03B6
Matting AB	0x0490
Maturix ApS	0x0D1A
Maven Machines, Inc.	0x0283
Maveric Automation LLC	0x0193
MAX-co., ltd	0x0B76
Maxell, Ltd.	0x0A19
Maxim Integrated Products	0x058B
MAXON INDUSTRIES, INC.	0x0C84
maxon motor ltd.	0x07FF
Maxscend Microelectronics Company Limited	0x03BA
Maytronics Ltd	0x0893
Maztech Industries, LLC	0x0CD7
MBARC LABS Inc	0x0715
MbientLab Inc	0x067E
MC10	0x00CA
McIntosh Group Inc	0x0C30
McLear Limited	0x04F6
MCOT INC.	0x0BC3
McWong International, Inc.	0x0CE6
Measurlogic Inc.	0x06C2
MED-EL	0x0647
Medallion Instrumentation Systems	0x05B1
Medela AG	0x0538
Medela, Inc	0x03A6
Media-Cartec GmbH	0x0BFE
MEDIATECH S.R.L.	0x074F
MediaTek, Inc.	0x0046

MEDIRLAB Orvosbiologiai Fejleszto Korlatolt Felelossegu Tarsasag	0x07F4
Medtronic Inc.	0x01F9
Megger Ltd	0x0CA6
Meggitt SA	0x0653
Meizhou Guo Wei Electronics Co., Ltd	0x0A57
Meizu Technology Co., Ltd.	0x03AB
Melange Systems Pvt. Ltd.	0x09E8
Melbot Studios, Sociedad Limitada	0x091E
MemCachier Inc.	0x042E
Mendeltron, Inc.	0x0C0C
Mequonic Engineering, S.L.	0x098B
Mercedes-Benz Group AG	0x017C
Mereltron bv	0x0C0D
Merlinia A/S	0x0226
Merry Electronics (S) Pte Ltd	0x0D14
MERRY ELECTRONICS CO., LTD.	0x0D13
Mesh Systems LLC	0x0B50
Mesh-Net Ltd	0x014C
Meshtech AS	0x042D
Meshtronix Limited	0x0657
Meso international	0x00B6
Meta Platforms Technologies, LLC	0x058E
Meta Platforms, Inc.	0x01AB
Meta Watch Ltd.	0x00A3
MetaLogics Corporation	0x0537
Metanate Limited	0x0444
MetaSystem S.p.A.	0x031F
METER Group, Inc. USA	0x0498
Metormote AB	0x0368
Metronom Health Europe	0x0949
MewTel Technology Inc.	0x002F
Meyer Sound Laboratories, Incorporated	0x06D1
MG Energy Systems B.V.	0x0A5D
MGM WIRELESSS HOLDINGS PTY LTD	0x0C5C
MHL Custom Inc	0x05CA
micas AG	0x015A

Michael Parkin	0x0754
MiCommand Inc.	0x0063
Micro-Design, Inc.	0x07D9
Microchip Technology Inc.	0x00CD
MICRODIA Ltd.	0x037D
Microoled	0x08F2
Micropower Group AB	0x0D33
Microsemi Corporation	0x04FF
Microsoft	0x0006
MICROSON S.A.	0x0A74
Microtronics Engineering GmbH	0x024E
Midmark	0x0CF1
Midwest Instruments & Controls	0x03B3
Miele & Cie. KG	0x0BC1
Mievo Technologies Private Limited	0x0CA9
Mighty Cast, Inc.	0x0147
Milestone AV Technologies LLC	0x06E1
Milwaukee Electric Tools	0x0165
Minami acoustics Limited	0x0CD9
MindPeace Safety LLC	0x0714
MindRhythm, Inc.	0x0B3F
MindTree Ltd.	0x006A
MinebeaMitsumi Inc.	0x062B
Minelab Electronics Pty Limited	0x01DE
Mini Solution Co., Ltd.	0x0458
MINIBREW HOLDING B.V	0x078C
Minut, Inc.	0x07E5
MIRA, Inc.	0x03CF
Miracle-Ear, Inc.	0x0BEC
Miridia Technology Incorporated	0x08DA
Misfit Wearables Corp	0x00DF
MISHIK Pte Ltd	0x0166
miSport Ltd.	0x02A8
Mist Systems, Inc.	0x0542
MistyWest Energy and Transport Ltd.	0x0A4B
Mitel Semiconductor	0x0010

MITSUBISHI ELECTRIC AUTOMATION (THAILAND) COMPANY LIMITED	0x0B66
Mitsubishi Electric Corporation	0x0014
MITSUBISHI ELECTRIC LIGHTING CO, LTD	0x0CA4
Mitutoyo Corporation	0x082A
MIWA LOCK CO.,Ltd	0x0543
MiX Telematics International (PTY) LTD	0x0C98
MIYAKAWA ELECTRIC WORKS LTD.	0x0D29
MIYOSHI ELECTRONICS CORPORATION	0x047B
MIZUNO Corporation	0x0879
Mobicomm Inc	0x021C
mobike (Hong Kong) Limited	0x04B3
Mobile Action Technology Inc.	0x09F6
Mobilian Corporation	0x0037
Mobilogix	0x09E5
Mobiquity Networks Inc	0x0221
Mobitrace	0x09CA
MOCA System Inc.	0x0B2E
Mode Lighting Limited	0x0661
Modul-System HH AB	0x07CA
modum.io AG	0x05D7
Moeco IOT Inc.	0x07B2
MOKO TECHNOLOGY Ltd	0x0A62
Molex Corporation	0x039F
Monadnock Systems Ltd.	0x08C7
Monarch International Inc.	0x0A91
Monidor	0x05A9
Monitra SA	0x033E
Monster, LLC	0x0070
Montage Connect, Inc.	0x0C05
Moonbird BV	0x0963
MooreSilicon Semiconductor Technology (Shanghai) Co., LTD.	0x0CD0
Mopeka Products LLC	0x0C7C
Morse Project Inc.	0x00F2
Moticon ReGo AG	0x08AE
Motion Instruments Inc.	0x05E6
Motionalysis, Inc.	0x0A42

Motiv, Inc.	0x036F
MOTIVE TECHNOLOGIES, INC.	0x036E
Motorola	0x0008
Motorola Solutions	0x04EC
MOTREX	0x0B8C
Motsai Research	0x0274
Movella Technologies B.V.	0x0886
Movesense Oy	0x0C93
MQA Limited	0x0C00
MSA Innovation, LLC	0x01A4
MSHeli s.r.l.	0x0237
MStar Semiconductor, Inc.	0x007A
Mstream Technologies., Inc.	0x0812
MTD Products Inc & Affiliates	0x08F7
MTG Co., Ltd.	0x0523
MTI Ltd	0x0216
Muguang (Guangdong) Intelligent Lighting Technology Co., Ltd	0x0B88
Mul-T-Lock	0x0333
Multi Care Systems B.V.	0x0483
Multibit Oy	0x0290
Muoverti Limited	0x0229
Murata Manufacturing Co., Ltd.	0x013C
Musen Connect, Inc.	0x07A6
Muzik LLC	0x00DE
My Smart Blinds	0x0596
MYLAPS B.V.	0x06C9
MYSPHERA	0x016C
mywerk system GmbH	0x0479
Myzee Technology	0x091F
NACON	0x0C82
Nagravision SA	0x09DA
Nain Inc.	0x044B
Nalu Medical, Inc.	0x05C0
Nanjing Linkpower Microelectronics Co.,Ltd	0x0C5F
Nanjing Qinheng Microelectronics Co., Ltd	0x07D7
NanoFlex Power Corporation	0x0A28

Nanoleaf Canada Limited	0x080B
Nanoleq AG	0x0B1C
NANOLINK APS	0x028C
NantSound, Inc.	0x0802
Naonext	0x08E8
NAOS JAPAN K.K.	0x0B15
Narhwall Inc.	0x09AD
Nathan Rhoades LLC	0x03DE
National Instruments	0x0554
Nations Technologies Inc.	0x0D16
Nautilus Inc.	0x00F4
Navcast, Inc.	0x06DE
Naya Health, Inc.	0x035E
ndd Medizintechnik AG	0x0BD4
Neatebox Ltd	0x04BB
NEC Corporation	0x0022
NEC Lighting, Ltd.	0x0095
Nectar	0x0184
Nemik Consulting Inc	0x0456
Neo Materials and Consulting Inc.	0x0967
NeoSensory, Inc.	0x07CF
Neosfar	0x02D8
NEOWRK SISTEMAS INTELIGENTES S.A.	0x0C01
Nerbio Medical Software Platforms Inc	0x0912
NeST	0x039A
Nest Labs Inc.	0x01B5
Nestlé Nespresso S.A.	0x0225
NETATMO	0x0155
Netclearance Systems, Inc.	0x0394
NetEase□Hangzhou□Network co.Ltd.	0x025C
NETGEAR, Inc.	0x0446
NETGRID S.N.C. DI BISSOLI MATTEO, CAMPOREALE SIMONE, TOGNETTI FEDERICO	0x067F
Netizens Sp. z o.o.	0x01B1
Netwake GmbH	0x0B95
NEURINNOV	0x0CAF

Neurosity, Inc.	0x0BCE
Neuvatek Inc.	0x0BC9
Nevro Corp.	0x0A31
New Audio LLC	0x099A
New Cosmos USA, Inc.	0x0BB4
New H3C Technologies Co.,Ltd	0x07AD
Newcon Optik	0x0559
Newlab S.r.l.	0x01D4
Newlogic	0x0017
NewTec GmbH	0x05B0
Nexite Ltd	0x0823
Nextivity Inc.	0x0C88
NextMind	0x0997
Nextscape Inc.	0x0A50
nFore Technology Co., Ltd.	0x0B44
NGK SPARK PLUG CO., LTD.	0x0A36
NIBROTECH LTD	0x0B25
NICHIEI INTEC CO., LTD.	0x0890
NIHON DENGYO KOUSAKU	0x06E6
Nike, Inc.	0x0078
Niko nv	0x05FE
Nikon Corporation	0x0399
Nima Labs	0x03DC
Nimble Devices Oy	0x0129
NingBo klite Electric Manufacture Co.,LTD	0x0B64
Nintendo Co., Ltd.	0x0553
NIO USA, Inc.	0x0B48
Nippon Ceramic Co.,Ltd.	0x09A9
Nippon Seiki Co., Ltd.	0x0110
NIPPON SMT.CO.,Ltd	0x032C
NIPPON SYSTEMWARE CO.,LTD.	0x02D7
Niruha Systems Private Limited	0x077A
Nissan Motor Co., Ltd.	0x0BA6
Nisshinbo Micro Devices Inc.	0x085B
NITTO DENKO ASIA TECHNICAL CENTRE PTE. LTD.	0x0767
NITTO KOGYO CORPORATION	0x0BAF

Nixie Labs, Inc.	0x0372
NNOXX, Inc	0x0C61
NO SMD LIMITED	0x0919
Nod, Inc.	0x013E
Nofence AS	0x05AB
Noke	0x038B
Nokia Mobile Phones	0x0001
Nokian Renkaat Oyj	0x0896
Nome Oy	0x08D6
Nomono AS	0x0B4A
Noodle Technology inc	0x076C
Noomi AB	0x069C
Noordung d.o.o.	0x0621
Nordic Semiconductor ASA	0x0059
Nordic Strong ApS	0x0AD0
Noritz Corporation.	0x0C38
North Pole Engineering	0x0330
NorthStar Battery Company, LLC	0x040D
Norwood Systems	0x002E
NOTHING TECHNOLOGY LIMITED	0x0CCB
NOVABASE S.R.L.	0x07EB
Novalogy LTD	0x0419
Novartis AG	0x052B
Novatel Wireless	0x0145
NOVEA ENERGIES	0x0B62
Novel Bits, LLC	0x08D3
Noventa AG	0x08C9
Novidan, Inc.	0x0A44
Novo Nordisk A/S	0x04CB
Novotec Medical GmbH	0x0359
Nox Medical	0x03FB
NS Tech, Inc.	0x0522
NTEO Inc.	0x0138
NTT docomo	0x02E2
NTT sonority, Inc.	0x0C9B
NUANCE HEARING LTD	0x095F

Nubia Technology Co.,Ltd.	0x08CA
Nuheara Limited	0x043A
Numa Products, LLC	0x0CD5
Nura Operations Pty Ltd	0x0533
Nuviz, Inc.	0x045E
Nuvoton	0x0ACC
nVisti, LLC	0x049B
NXP B.V.	0x0025
Nymbus, LLC	0x06A3
nymea GmbH	0x0AD6
Nymi Inc.	0x01B2
Nytec, Inc.	0x01B3
O. E. M. Controls, Inc.	0x05A4
O2 Micro, Inc.	0x0785
OBIQ Location Technology Inc.	0x06A0
Oblamatik AG	0x091C
Occly LLC	0x047D
OCEASOFT	0x0273
OCOSMOS Co., Ltd.	0x0384
Oculeve, Inc.	0x0720
Odic Incorporated	0x086A
ODM Technology, Inc.	0x0096
OFF Line Co., Ltd.	0x051D
OFF Line Japan Co., Ltd.	0x0C1D
Off-Highway Powertrain Services Germany GmbH	0x0CE4
Offcode Oy	0x0B7E
Ohsung Electronics	0x0957
OJ Electronics A/S	0x0CF6
OJMAR SA	0x09EE
OKI Electric Industry Co., Ltd	0x09F5
Olumee	0x0B14
Olympic Ophthalmics, Inc.	0x0A6B
Olympus Corporation	0x04D0
OM Digital Solutions Corporation	0x09F1
Omegawave Oy	0x00AE
OMNI Remotes	0x057A

Omni-ID USA, INC.	0x0AC0
Omnisense Limited	0x0920
Omnivoltaic Energy Solutions Limited Company	0x0B37
OMRON Corporation	0x02D5
Omron Healthcare Co., LTD	0x020E
ON Semiconductor	0x0362
OnAsset Intelligence, Inc.	0x0614
OnBeep	0x0151
ONCELABS LLC	0x0C44
OnePlus Electronics (Shenzhen) Co., Ltd.	0x072F
OneSpan	0x02C8
ONKYO Corporation	0x062F
Onset Computer Corporation	0x00C5
OOBIK Inc.	0x0A94
Ooma	0x0A70
Oort Technologies LLC	0x02B7
Open Bionics Ltd.	0x0ABA
Open Interface	0x0027
Open Platform Systems LLC	0x072E
Open Research Institute, Inc.	0x064A
Open Road Solutions, Inc.	0x0CC5
Openbrain Technologies, Co., Ltd.	0x0113
OPEX Corporation	0x0A41
OPPLE Lighting Co., Ltd	0x0539
Optalert	0x0881
Optek	0x0800
OPTEX CO.,LTD.	0x06E5
Optikam Tech Inc.	0x078B
OPTIMUSIOT TECH LLP	0x090E
OR Technologies Pty Ltd	0x0747
Oras Oy	0x0A08
ORB Innovations Ltd	0x0C3B
ORBCOMM	0x0371
ORBIS Inc.	0x09D4
Orlan LLC	0x024B
Orpyx Medical Technologies Inc.	0x0C4C

ORSO Inc.	0x084C
OrthoAccel Technologies	0x041B
OrthoSensor, Inc.	0x0544
OS42 UG (haftungsbeschraenkt)	0x0616
OSM HK Limited	0x0AAC
OSRAM GmbH	0x050C
Ossur hf.	0x0814
OTC engineering	0x0BE2
OTF Distribution, LLC	0x0BC8
OTF Product Sourcing, LLC	0x0C2D
OTL Dynamics LLC	0x00A5
Otodata Wireless Network Inc.	0x03B1
Otodynamics Ltd	0x0556
Otter Products, LLC	0x0206
OttoQ Inc	0x032F
Oura Health Oy	0x02B2
OurHub Dev IvS	0x047E
OV LOOP, INC.	0x05AF
ovrEngineered, LLC	0x04A2
Owl Labs Inc.	0x03F7
Oxford Metrics plc	0x05BB
Oxstren Wearable Technologies Private Limited	0x0476
Ozo Edu, Inc.	0x03EB
P.I.Engineering	0x05C1
Pac Sane Limited	0x0A6E
PaceBait IVS	0x0A2B
Pacific Bioscience Laboratories, Inc	0x04EA
Pacific Coast Fishery Services (2003) Inc.	0x0CEC
Pacific Lock Company	0x02A4
Pacific Track, LLC	0x086B
Packetcraft, Inc.	0x07E8
PAFERS TECH	0x0701
Pal Electronics	0x0C27
PAL Technologies Ltd	0x03F4
Palago AB	0x0469
Pambor Ltd.	0x046E

Pamex Inc.	0x0A95
Panasonic Holdings Corporation	0x003A
Panda Ocean Inc.	0x00A6
Panduit Corp.	0x065D
Pangaea Solution	0x0787
Parabit Systems, Inc.	0x05B3
Paradox Engineering SA	0x080F
Parakey AB	0x0C6F
Parker Hannifin Corp	0x0248
PARROT AUTOMOTIVE SAS	0x0043
Parsyl Inc	0x0857
Parthus Technologies Inc.	0x000E
Particle Industries, Inc.	0x0662
Passif Semiconductor Corp	0x00B0
PassiveBolt, Inc.	0x094E
PAUL HARTMANN AG	0x0ABF
Paxton Access Ltd	0x0196
Paybuddy ApS	0x09A7
Payex Norge AS	0x0658
PayPal, Inc.	0x00F0
PayRange Inc.	0x02C9
PB INC.	0x0B1E
PCB Piezotronics, Inc.	0x0789
PCH International	0x0163
PCI Private Limited	0x092C
PEAG, LLC dba JLab Audio	0x0CE9
Pebble Technology	0x0154
PEEQ DATA	0x0311
PEG PEREGO SPA	0x03D4
Pegasus Technologies, Inc.	0x09B6
Pektron Group Limited	0x0853
Peloton Interactive Inc.	0x0768
PentaLock Aps.	0x09B4
Pepperl + Fuchs GmbH	0x0844
Perfect Company	0x0A8E
Performance Electronics, Ltd.	0x0C26

Perimeter Technologies, Inc.	0x0BCA
Pertech Industries Inc	0x0B8D
Perytons Ltd.	0x0149
Peter Systemtechnik GmbH	0x00AD
petPOMM, Inc	0x03B5
Petronics Inc.	0x05DC
PetVoice Co., Ltd.	0x0D0E
Petzl	0x0296
PF SCHWEISSTECHNOLOGIE GMBH	0x08B2
Pharynks Corporation	0x022C
PHC Corporation	0x0726
phg Peter Hengstler GmbH + Co. KG	0x0C63
Phiaton Corporation	0x0C62
Philadelphia Scientific (U.K.) Limited	0x0623
Philia Technology	0x08E0
Philip Morris Products S.A.	0x0223
Phillips Connect Technologies LLC	0x087F
Phillips-Medisize A/S	0x035A
PHONEPE PVT LTD	0x0629
PHOTODYNAMIC INCORPORATED	0x09AA
Photron Limited	0x0682
Phrame Inc.	0x061F
PHYPLUS Inc	0x0504
Physical Enterprises Inc.	0x0189
PhysioLogic Devices, Inc.	0x0D2A
Piaggio Fast Forward	0x083B
Pico Technology Inc.	0x03C4
Pieps GmbH	0x0351
PIKOLIN S.L.	0x0763
Pillsy Inc.	0x0433
Pinnacle Technology, Inc.	0x0A32
Pinpoint Innovations Limited	0x0908
Pioneer Corporation	0x0150
Pirelli Tyre S.P.A.	0x04F5
pironex GmbH	0x01C0
Pitius Tec S.L.	0x015C

Pitpatpet Ltd	0x0236
PixArt Imaging Inc.	0x065C
Pixie Dust Technologies, Inc.	0x0998
Planmeca Oy	0x0D0C
PlantChoir Inc.	0x0799
Plantronics, Inc.	0x0055
Plastimold Products, Inc	0x08FF
Playbrush	0x0254
PlayerData Limited	0x09B8
Playfinity AS	0x0612
Plejd AB	0x0377
Plume Design Inc	0x0A17
PLUS Location Systems Pty Ltd	0x0104
PMD Solutions	0x046B
PNI Sensor Corporation	0x04A1
Podo Labs, Inc	0x016F
POGS B.V.	0x0CEF
PointGuard, LLC	0x0966
Pointr Labs Limited	0x08D9
Pokkels	0x0A6C
Polar Electro Europe B.V.	0x00D1
Polar Electro OY	0x006B
Polaris IND	0x0501
Polidea Sp. z o.o.	0x08AF
Poly-Control ApS	0x01C8
Polycom, Inc.	0x059E
Polymap Wireless	0x0357
Polymorphic Labs LLC	0x0496
PONE BIOMETRICS AS	0x0BF3
Popit Oy	0x0973
Popper Pay AB	0x049F
Porsche AG	0x0120
POS Tuning Udo Vosshenrich GmbH & Co. KG	0x0482
Potrykus Holdings and Development LLC	0x081D
Powercast Corporation	0x02D3
POWERMAT LTD	0x047C

Pozyx NV	0x09AE
PPRS	0x0951
Praxis Dynamics	0x0222
Precision Outcomes Ltd	0x0382
Precision Triathlon Systems Limited	0x0B03
Precor	0x071B
Preddio Technologies Inc.	0x09E0
Presidio Medical, Inc.	0x0B84
PressurePro	0x05E7
Prestigio Plaza Ltd.	0x0137
Prevayl Limited	0x08BC
Prevent Biometrics	0x0347
Pricer AB	0x0CBD
Primus Inter Pares Ltd	0x01D0
Princess Cruise Lines, Ltd.	0x0CA5
Private limited company "Teltonika"	0x089A
Pro-Mark, Inc.	0x047F
Procept	0x062E
Procon Analytics, LLC	0x0BD3
Procter & Gamble	0x00DC
prodigy	0x053B
Produal Oy	0x06AA
Prolojik Limited	0x063A
Prolon Inc.	0x0429
Promethean Ltd.	0x0126
Proof Diagnostics, Inc.	0x09A0
Propagation Systems Limited	0x03B2
Propeller Health	0x0378
PROTECH S.A.S. DI GIRARDI ANDREA & C.	0x055F
Protect Animals With Satellites LLC	0x0CFA
Proxy Technologies, Inc.	0x0304
PS Engineering, Inc.	0x0AAE
PS GmbH	0x092E
PSA Peugeot Citroen	0x0A88
PSIKICK, INC.	0x0571
PSP - Pauli Services & Products GmbH	0x08F3

PSYONIC, Inc.	0x0882
PT SADAMAYA GRAHA TEKNOLOGI	0x0C7B
Puff Corp	0x0C03
Pulsate Mobile Ltd.	0x01BE
Pune Scientific LLP	0x079F
Pur3 Ltd	0x0590
PURA SCENTS, INC.	0x0BD8
Puratap Pty Ltd	0x0BE6
Pure International Limited	0x0665
Qblinks	0x016B
Qingdao Eastsoft Communication Technology Co.,Ltd	0x0C86
Qingdao Haier Technology Co., Ltd.	0x0929
Qingdao Realtime Technology Co., Ltd.	0x046C
Qingdao Yeelink Information Technology Co., Ltd.	0x0164
Qingping Technology (Beijing) Co., Ltd.	0x0781
Qorvo Utrecht B.V.	0x0453
Qrio Inc	0x0235
QT Medical INC.	0x05DE
Qualcomm	0x001D
Qualcomm Connected Experiences, Inc.	0x00D8
Qualcomm Innovation Center, Inc. (QuIC)	0x00B8
Qualcomm Labs, Inc.	0x011A
Qualcomm Life Inc	0x03E3
Qualcomm Technologies International, Ltd. (QTIL)	0x000A
Qualcomm Technologies, Inc.	0x00D7
Queercon, Inc	0x04D3
Quha oy	0x0B68
Quintic Corp	0x008E
Quintrax Limited	0x0481
quip NYC Inc.	0x07F8
Quuppa Oy.	0x00C7
R F Micro Devices	0x0028
R-DAS, s.r.o.	0x0ABB
R.O. S.R.L.	0x09F8
R.W. Beckett Corporation	0x061A
R9 Technology, Inc.	0x04ED

RAB Lighting, Inc.	0x07A5
RACHIO, INC.	0x0D1B
Racketry, d. o. o.	0x0CB5
Radar Automobile Sales(Shandong)Co.,Ltd.	0x0C8F
Raden Inc	0x02B1
Radiance Technologies	0x0439
Radiawave Technologies Co.,Ltd.	0x090C
Radinn AB	0x07C2
Radio Sound	0x0CF3
Radio Systems Corporation	0x01FE
RadioPulse Inc	0x0597
Radioworks Microelectronics PTY LTD	0x0AF4
radius co., ltd.	0x077C
Radius Networks, Inc.	0x0118
Rafaelmicro	0x0864
Ralink Technology Corporation	0x005B
RandomLab SAS	0x0699
rapitag GmbH	0x0598
Rashidov ltd	0x08E4
Ratio Electric BV	0x0BFF
RATOC Systems, Inc.	0x0B60
Raven Industries	0x023E
Rayden.Earth LTD	0x08C1
Raytac Corporation	0x068A
Razer Inc.	0x068E
RB Controls Co., Ltd.	0x0515
RCP Software Oy	0x05A0
RDA Microelectronics	0x0061
React Accessibility Limited	0x07D2
React Mobile	0x0B6E
REACTEC LIMITED	0x04E1
READY FOR SKY LLP	0x0BC0
Real Time Automation, Inc.	0x045F
Real-World-Systems Corporation	0x05BF
Realityworks, inc.	0x0AA6
Realme Chongqing Mobile Telecommunications Corp., Ltd.	0x08A4

RealMega Microelectronics technology (Shanghai) Co. Ltd.	0x0AC2
Realtek Semiconductor Corporation	0x005D
RealThingks GmbH	0x0937
REALTIMEID AS	0x0B3D
Reconnect, Inc.	0x0935
Red 100 Lighting Co., ltd.	0x0B39
Red-M (Communications) Ltd	0x0032
REDARC ELECTRONICS PTY LTD	0x0B2D
Redbird Flight Simulations	0x02BF
Redmond Industrial Group LLC	0x056D
Redpine Signals Inc	0x06FF
Reelables, Inc.	0x0ADB
Reflow Pty Ltd	0x0A07
Regal Beloit America, Inc.	0x0CE1
Regent Beleuchtungskorper AG	0x07A0
REGULA Ltd.	0x07BF
REHABTRONICS INC.	0x04E7
Reiner Kartengeraete GmbH & Co. KG.	0x03E8
Relations Inc.	0x0401
Remedee Labs	0x07DB
Remote Solution Co., LTD.	0x075F
Renault SA	0x07FC
Renesas Electronics Corporation	0x0036
Renishaw PLC	0x0655
Reoqoo IoT Technology Co., Ltd.	0x0CD4
Republic Wireless, Inc.	0x08E3
Research Products Corporation	0x0D0B
RESIDEO TECHNOLOGIES, INC.	0x0B01
Resmed Ltd	0x038D
Resolution Products, Ltd.	0x0134
Respiri Limited	0x0713
RESPONSE TECHNOLOGIES, LTD.	0x0CDE
Revenue Collection Systems FRANCE SAS	0x0641
Revol Technologies Inc	0x0484
REVSMART WEARABLE HK CO LTD	0x071A
Revvo Technologies, Inc.	0x086C

RF Code, Inc.	0x0286
RF Creations	0x0CB1
RF Digital Corp	0x028E
RF INNOVATION	0x0457
RFID Global by Softwork SrL	0x05BE
RHA TECHNOLOGIES LTD	0x0664
Rheem Sales Company, Inc.	0x0C56
RHOMBUS SYSTEMS, INC.	0x075D
Ribbiot, INC.	0x0C9D
Ricoh Company Ltd	0x065F
RIDE VISION LTD	0x0A16
Rigado LLC	0x0202
RIIG AI Sp. z o.o.	0x0314
RIKEN KEIKI CO., LTD.,	0x0834
Rinnai Corporation	0x02B9
Rion Co., Ltd.	0x056B
Rivata, Inc.	0x0A83
Rivian Automotive, LLC	0x0941
Rivieh, Inc.	0x0B5F
RivieraWaves S.A.S	0x0060
RJ Brands LLC	0x05CD
RM Acquisition LLC	0x04D9
Roambee Corporation	0x06A6
Roambotics, Inc.	0x0BAD
Robert Bosch GmbH	0x02A6
Robkoo Information & Technologies Co., Ltd.	0x0ABE
Roca Sanitario, S.A.	0x0B1A
Roche Diabetes Care AG	0x0170
Rochester Sensors, LLC	0x0C7F
Rockchip Electronics Co., Ltd.	0x0C1B
Rockford Corp.	0x03F8
Rocky Mountain ATV/MC Jake Wilson	0x0D02
Rohde & Schwarz GmbH & Co. KG	0x0019
Roku, Inc.	0x07A2
ROL Ergo	0x0153
Roland Corporation	0x0A0E

Rookery Technology Ltd	0x0607
ROOQ GmbH	0x0927
Rosewill	0x09C1
Rotor Bike Components	0x0323
Rotronic AG	0x0B89
RTB Elektronik GmbH & Co. KG	0x02AC
RTC Industries, Inc.	0x0660
RTX A/S	0x0015
Runteq Oy Ltd	0x02F8
Runtime, Inc.	0x05C3
Ruuvi Innovations Ltd.	0x0499
ruwido austria gmbh	0x027F
Rx Networks, Inc.	0x02AD
Ryeex Technology Co.,Ltd.	0x0649
RYSE INC.	0x0409
S-Labs Sp. z o.o.	0x048D
S-Power Electronics Limited	0x00BB
SAAB Aktiebolag	0x0BBE
SABIK Offshore GmbH	0x0678
safectory GmbH	0x0A35
SafeLine Sweden AB	0x06EA
SafePort	0x084D
Safera Oy	0x072D
Safetech Products LLC	0x04CD
SafeTrust Inc.	0x034E
Safetytest GmbH	0x0BEF
SALTO SYSTEMS S.L.	0x0199
SaluStim Group Oy	0x0BB9
Salutica Allied Solutions	0x0127
Sam Labs Ltd.	0x01CC
Samsara Networks, Inc	0x0B6B
Samsung Electronics Co. Ltd.	0x0075
Samsung SDS Co., Ltd.	0x02DE
Sanistaal A/S	0x0B0B
Sankyo Air Tech Co.,Ltd.	0x0B79
SANlight GmbH	0x0A8B

Sano, Inc.	0x01E9
Sanofi	0x0743
SANYO DENKO Co.,Ltd.	0x0B0D
Saphe International	0x0367
Sapphire Circuits LLC	0x0250
Sappl Verwaltungs- und Betriebs GmbH	0x092A
Saris Cycling Group, Inc	0x00B1
Sarita CareTech APS	0x0560
Sartorius AG	0x06FB
Sarvavid Software Solutions LLP	0x074B
Saucon Technologies	0x089B
Savant Systems LLC	0x01D9
Savitech Corp.,	0x053A
SAVOY ELECTRONIC LIGHTING	0x09B9
Saxonar GmbH	0x0AED
SB C&S Corp.	0x0CC7
Scale-Tec, Ltd	0x064B
Scandinavian Health Limited	0x0C13
Scangrip A/S	0x0B7C
SCARAB SOLUTIONS LTD	0x0C70
Schawbel Technologies LLC	0x0266
Schneider Electric	0x02B6
Schneider Schreibgeräte GmbH	0x024F
SchoolBoard Limited	0x039E
Schrader Electronics	0x0601
SCIENTERRA LIMITED	0x0D20
sclak s.r.l.	0x088A
SCM Group	0x0B81
Scope Logistical Solutions	0x0906
Scosche Industries, Inc.	0x0791
Screenovate Technologies Ltd	0x053C
Scribble Design Inc.	0x0A6A
Scuf Gaming International, LLC	0x057F
SDATAWAY	0x0395
Sears Holdings Corporation	0x0402
SEAT es	0x0125

seca GmbH & Co. KG	0x0CB9
SECOM CO., LTD.	0x0442
Security Enhancement Systems, LLC	0x09A5
Secuyou ApS	0x02D4
SECVRE GmbH	0x0261
Seekwave Technology Co.,ltd.	0x0C4D
Seers Technology Co., Ltd.	0x007D
SeeScan	0x05F3
SEFAM	0x0412
Seguro Technology Sp. z o.o.	0x02BE
Seibert Williams Glass, LLC	0x04C5
Seiko Epson Corporation	0x0040
Seiko Instruments Inc.	0x0B8A
Seitec Elektronik GmbH	0x0746
Selekt Bilgisayar, Iletisim Urunleri Insaat Sanayi ve Ticaret Limited Sirketi	0x095A
Selfly BV	0x00C6
SELVE GmbH & Co. KG	0x05C5
Semilink Inc	0x00E2
Sena Technologies Inc.	0x0960
Sencilion Oy	0x06B4
Send Solutions	0x02D6
Sendum Wireless Corporation	0x099B
Sengled Co., Ltd.	0x08B4
Senic Inc.	0x0C09
SenionLab AB	0x01BC
Senix Corporation	0x040C
SENNHEISER electronic GmbH & Co. KG	0x0494
SENOSPACE LLC	0x0CCE
Senquip Pty Ltd	0x0A71
SENS Innovation ApS	0x061D
Sens.ai Incorporated	0x0AB8
Sensa LLC	0x0C6E
SensaRx	0x0260
SENSATEC Co., Ltd.	0x09F7
Senscomm Semiconductor Co., Ltd.	0x0B8F
SenseQ Inc.	0x06AE

Sensibo, Inc.	0x0898
Sensirion AG	0x06D5
Sensitech, Inc.	0x0B6C
Senso4s d.o.o.	0x09CC
Sensoan Oy	0x03E2
Sensogram Technologies, Inc.	0x02E9
Sensolus	0x0A11
Sensome	0x054D
Sensoria Holdings LTD	0x0B9D
Sensority, s.r.o.	0x077D
Sensormate AG	0x0BE8
Sensoryx AG	0x0D2B
Sensovium Inc.	0x08D1
SensTek	0x0A97
Sentek Pty Ltd	0x0B61
Sentrax GmbH	0x0B41
SentriLock	0x0176
Sera4 Ltd.	0x02A2
Seraphim Sense Ltd	0x0187
SERENE GROUP, INC	0x07F2
Serial Technology Corporation	0x0CC6
Server Technology Inc.	0x00EB
SES-Imagotag	0x0A89
Sesam Solutions BV	0x065B
Setec Pty Ltd	0x051F
SetPoint Medical	0x036A
SFS unimarket AG	0x0899
SGL Italia S.r.l.	0x0310
SGV Group Holding GmbH & Co. KG	0x0646
ShadeCraft, Inc	0x06B8
Shake-on B.V.	0x050A
Shanghai All Link Microelectronics Co.,Ltd	0x0AF2
Shanghai Flyco Electrical Appliance Co., Ltd.	0x04C8
Shanghai Frequen Microelectronics Co., Ltd.	0x02FC
Shanghai high-flying electronics technology Co.,Ltd	0x0A99
Shanghai InGeek Cyber Security Co., Ltd.	0x0759

Shanghai Kfcube Inc	0x08A8
Shanghai Mountain View Silicon Co.,Ltd.	0x06D9
Shanghai MXCHIP Information Technology Co., Ltd.	0x0922
Shanghai Panchip Microelectronics Co., Ltd	0x07D1
Shanghai Proxy Network Technology Co., Ltd.	0x0CB8
Shanghai Smart System Technology Co., Ltd	0x0A87
Shanghai Suisheng Information Technology Co., Ltd.	0x0828
ShangHai Super Smart Electronics Co. Ltd.	0x0072
Shanghai Top-Chip Microelectronics Tech. Co., LTD	0x07CE
Shanghai wuqi microelectronics Co.,Ltd	0x0A06
Shanghai Xiaoyi Technology Co.,Ltd.	0x05A1
Shanghai Yidian Intelligent Technology Co., Ltd.	0x0A0C
ShapeLog, Inc.	0x07EA
Sharknet srl	0x0541
SharkNinja Operating LLC	0x0C4F
Sharp Corporation	0x0381
Shenzhen Aimore. Co.,Ltd	0x0AD9
SHENZHEN AUKEY E BUSINESS CO., LTD	0x08DC
Shenzhen CESI Information Technology Co., Ltd.	0x0CCF
SHENZHEN CHENYUN ELECTRONICS CO., LTD	0x0CDF
Shenzhen Conex	0x081A
Shenzhen CoolKit Technology Co., Ltd	0x0ACA
Shenzhen Excelsecu Data Technology Co.,Ltd	0x00C1
Shenzhen Feasycom Technology Co., Ltd.	0x0A2D
shenzhen fitcare electronics Co.,Ltd	0x082B
Shenzhen Goodix Technology Co., Ltd	0x04F7
Shenzhen Grandsun Electronic Co.,Ltd.	0x0A90
Shenzhen Gwell Times Technology Co. , Ltd	0x0C76
Shenzhen H&T Intelligent Control Co., Ltd	0x0A2C
Shenzhen ImagineVision Technology Limited	0x0B5B
Shenzhen iMCO Electronic Technology Co.,Ltd	0x0379
Shenzhen Injoinic Technology Co., Ltd.	0x0BD6
Shenzhen Jingxun Technology Co., Ltd.	0x0AC1
SHENZHEN KAADAS INTELLIGENT TECHNOLOGY CO.,Ltd	0x0B53
Shenzhen KTC Technology Co.,Ltd.	0x0B7A
SHENZHEN LEMONJOY TECHNOLOGY CO., LTD.	0x03E9

Shenzhen Malide Technology Co.,Ltd	0x0B6F
Shenzhen Minew Technologies Co., Ltd.	0x0639
Shenzhen Openhearing Tech CO., LTD .	0x0CAD
Shenzhen Poseidon Network Technology Co., Ltd	0x0CAA
Shenzhen Qianfenyi Intelligent Technology Co., LTD	0x0B08
Shenzhen Shokz Co.,Ltd.	0x0CAC
Shenzhen Simo Technology co. LTD	0x08E2
Shenzhen SuLong Communication Ltd	0x0233
Shenzhen Sunricher Technology Limited	0x0A78
Shenzhen Tingting Technology Co. LTD	0x0CEB
Shenzhen TonliScience and Technology Development Co.,Ltd	0x07F6
Shenzhen Uascent Technology Co., Ltd	0x0AA5
Shenzhen Yopeak Optoelectronics Technology Co., Ltd.	0x0A3F
Shenzhen Zhongguang Infotech Technology Development Co., Ltd	0x06CA
Shibutani Co., Ltd.	0x06F1
SHIMANO INC.	0x044A
Shindengen Electric Manufacturing Co., Ltd.	0x0BE9
SHINKAWA Sensor Technology, Inc.	0x0CB2
Shoof Technologies	0x06AF
Shortcut Labs	0x030F
Shure Inc	0x04AD
SIA Mesh Group	0x0CD8
SIANA Systems	0x0A0B
Sibel Inc.	0x09ED
Siemens AG	0x022E
SiFli Technologies (shanghai) Inc.	0x0A4C
SIG SAUER, INC.	0x0B17
Sigma Connectivity AB	0x03D3
Sigma Designs, Inc.	0x0355
SignalQuest, LLC	0x0C37
Signia Technologies, Inc.	0x001B
Signify Netherlands B.V.	0x060F
Signtle Inc.	0x0BC7
Sigur	0x06EC
SIKOM AS	0x05EF
SIL System Integration Laboratory GmbH	0x0D2C

Silergy Corp	0x053F
silex technology, inc.	0x061B
Silicon Laboratories	0x02FF
Silicon Wave	0x000B
Silk Labs, Inc.	0x0432
Silvair, Inc.	0x0136
SILVER TREE LABS, INC.	0x0B97
Silver Wolf Vehicles Inc.	0x0B31
SilverPlus, Inc	0x0540
Simm Tronic Limited	0x06C6
SimpliSafe, Inc.	0x06B1
Simplo Technology Co., LTD	0x020D
Sinnoz	0x054F
Sino Wealth Electronic Ltd.	0x0121
Sinosun Technology Co., Ltd.	0x047A
SINTEF	0x0B36
SIRC Co., Ltd.	0x08BF
SiRF Technology, Inc.	0x0050
SIRONA Dental Systems GmbH	0x0D3C
SISTEMAS KERN, SOCIEDAD ANÓMINA	0x0808
Site IQ LLC	0x0BF1
Siteco GmbH	0x0A3C
Situne AS	0x049A
Sivantos GmbH	0x0295
Six Guys Labs, s.r.o.	0x0619
SK Telecom	0x0289
SKC Inc	0x0815
SKF (U.K.) Limited	0x040E
SKIDATA AG	0x0485
Skoda Auto a.s.	0x011E
Skullcandy, Inc.	0x07C9
Sky UK Limited	0x079C
Sky Wave Design	0x01D3
SkyHawke Technologies	0x0B49
SkyStream Corporation	0x09BB
Smablo LTD	0x03AC

SmallLoop, LLC	0x0428
Smart Animal Training Systems, LLC	0x05C6
Smart Component Technologies Limited	0x0535
Smart Parks B.V.	0x0A61
Smart Sensor Devices AB	0x075B
Smart Solution Technology, Inc.	0x04E6
Smart Technologies and Investment Limited	0x0549
Smart Wave Technologies Canada Inc	0x07CD
SMART-INNOVATION.inc	0x02EF
Smartbotics Inc.	0x0205
SMARTD TECHNOLOGIES INC.	0x0C24
SmartDrive	0x0862
Smartifier Oy	0x00F5
Smartloxx GmbH	0x079E
SmartMovt Technology Co., Ltd	0x03A3
SmartResQ ApS	0x0876
SmartSensor Labs Ltd	0x0861
SmartSnugg Pty Ltd	0x070D
SmartWireless GmbH & Co. KG	0x0891
SMK Corporation	0x0265
SMT ELEKTRONIK GmbH	0x0AFB
Snap-on Incorporated	0x07DF
Snapchat Inc	0x03C2
SnapStyk Inc.	0x0430
SNIFF LOGIC LTD	0x0C6C
Snowball Technology Co., Ltd.	0x0A85
Snuza (Pty) Ltd	0x00DB
Sociometric Solutions, Inc.	0x06B6
Société des Produits Nestlé S.A.	0x037F
Socket Mobile	0x0044
SOCOMEC	0x0744
SODA GmbH	0x0416
Soliton Systems K.K.	0x088D
SOLUM CO., LTD	0x0B6D
SOLUTIONS AMBRA INC.	0x07D8
SOLUX PTY LTD	0x0CF4

Soma Labs LLC	0x0BAE
Somatix Inc	0x06C7
SOMFY SAS	0x05C8
SomnoMed Limited	0x0C17
Sonas, Inc.	0x0CA8
SONICOS ENTERPRISES, LLC	0x0BA5
SonicSensory Inc	0x097E
SONO ELECTRONICS. CO., LTD	0x0320
Sonos Inc	0x05A7
Sonova AG	0x0282
Sonova Consumer Hearing GmbH	0x0BA3
Sontheim Industrie Elektronik GmbH	0x0A5A
Sony Corporation	0x012D
Sony Ericsson Mobile Communications	0x0056
soonisys	0x0B09
Soprod SA	0x0512
Soraa Inc.	0x04B8
SOREX - Wireless Solutions GmbH	0x0491
Sospitas, s.r.o.	0x04C1
Sound ID	0x006F
SOUNDBOKS	0x0858
Soundbrenner Limited	0x07B6
Soundmax Electronics Limited	0x06A9
South Silicon Valley Microelectronics	0x039B
Southwire Company, LLC	0x0A05
SPACEEK LTD	0x045B
Spacelabs Medical Inc.	0x08F9
Span.IO, Inc.	0x09BF
Spark	0x0D15
Spark Technology Labs Inc.	0x0667
Sparkage Inc.	0x077E
Sparkpark AS	0x0D00
Spartek Systems Inc.	0x0D12
Spaulding Clinical Research	0x0593
SPD Development Company Ltd	0x03E1
Specifi-Kali LLC	0x0502

Spectrum Brands, Inc.	0x0356
Spectrum Technologies, Inc.	0x09F4
Sphinx Electronics GmbH & Co KG	0x0454
SPICA SYSTEMS LLC	0x0816
Spicebox LLC	0x0168
Spinlock Ltd	0x06E3
Spintly, Inc.	0x0AA9
SportIQ	0x012B
Sports Tracking Technologies Ltd.	0x007E
Spreadtrum Communications Shanghai Ltd	0x01EC
SQL Technologies Corp.	0x0A54
Squadrone Systems Inc.	0x01D7
Square Panda, Inc.	0x0625
Square, Inc.	0x0AEB
SR-Medizinelektronik	0x00A1
SRAM	0x0933
SSV Software Systems GmbH	0x0AD3
ST Microelectronics	0x0030
St. Jude Medical, Inc.	0x03C5
STABILO International	0x04E8
Staccato Communications, Inc.	0x004D
Stages Cycling LLC	0x01BA
STALKIT AS	0x0727
Stalmart Technology Limited	0x00BF
Stamer Musikanlagen GMBH	0x022A
Stanley Black and Decker	0x00FE
stAPPtronics GmbH	0x05E2
Star Micronics Co., Ltd.	0x01B0
Star Technologies	0x0589
Starkey Hearing Technologies	0x00BA
StarLeaf Ltd	0x0796
STARLITE Co., Ltd.	0x07DA
START TODAY CO.,LTD.	0x058A
Stasis Labs, Inc.	0x0651
Statsports International	0x04C0
Steelcase, Inc.	0x0473

Steelseries ApS	0x0111
Steinel Solutions AG	0x09EF
Steinel Vertrieb GmbH	0x0563
Steiner-Optik GmbH	0x04CA
Stemco Products Inc	0x0697
STEMP Inc.	0x0207
Step One Limited	0x099E
StepUp Solutions ApS	0x0C5D
steute Schaltgerate GmbH & Co. KG	0x0279
StickNFind	0x00F9
Stinger Equipment, Inc.	0x0C3F
STIR	0x01E8
STL	0x0AB9
StoneL	0x0281
Stonestreet One, LLC	0x005E
storm power ltd	0x0297
Storz & Bickel GmbH & Co. KG	0x06C8
Strainstall Ltd	0x019F
Streamit B.V.	0x0AD5
StreetCar ORV, LLC	0x0C72
Structural Health Systems, Inc.	0x03C7
stryker	0x0A5F
SUBARU Corporation	0x0A10
Subeca, Inc.	0x0851
Successful Endeavours Pty Ltd	0x076F
Summit Data Communications, Inc.	0x006E
SUNCORPORATION	0x0904
Sunplus Technology Co., Ltd.	0x0AE7
Sunrise Micro Devices, Inc.	0x01AF
Sunstone-RTLS Ipari Szolgaltato Korlatolt Felelossegu Tarsasag	0x0C9C
Super B Lithium Power B.V.	0x0BD5
Surefire, LLC	0x0308
Suunto Oy	0x009F
Suzhou Pairlink Network Technology	0x05B9
Svantek Sp. z o.o.	0x04C7
Svep Design Center AB	0x0452

SwaraLink Technologies	0x0729
Swedlock AB	0x0AC9
Swiftronix AB	0x04B5
SwiftSensors	0x0292
SwingLync L. L. C.	0x04FC
SwipeSense, Inc.	0x0CB0
Swipp ApS	0x0305
Swirl Networks	0x00B5
Swiss Audio SA	0x0407
SWISSINNO SOLUTIONS AG	0x0BBB
Swissprime Technologies AG	0x02BA
Sylero	0x0551
Sylvac sa	0x0BCC
Symbol Technologies, Inc.	0x002A
Synapse Electronics	0x0284
Synaptics Incorporated	0x0A76
SYNCHRON, INC.	0x0D31
Synergy Tecnologia em Sistemas Ltda	0x09D8
Syng Inc	0x0A15
Synkopi, Inc.	0x0D1F
Synopsys, Inc.	0x0031
Syntronix Corporation	0x0038
SYSDEV Srl	0x03CB
System Elite Holdings Group Limited	0x0D25
Systemic Games, LLC	0x0D39
Systems and Chips, Inc	0x003E
Syszone Co., Ltd	0x01BD
SZ DJI TECHNOLOGY CO.,LTD	0x08AA
T&A Laboratories LLC	0x0694
T&D	0x0392
T+A elektroakustik GmbH & Co.KG	0x0BFC
T-Mobile USA	0x0C8C
T2REALITY SOLUTIONS PRIVATE LIMITED	0x0BBC
T5 tek, Inc.	0x0BF5
Taco, Inc.	0x0C53
Tactile Engineering, Inc.	0x0C4E

Tacx b.v.	0x0689
Taelek Oy	0x048A
TAG HEUER SA	0x0CE7
Tag-N-Trac Inc	0x09E1
Taiga Motors Inc.	0x0B83
Tait International Limited	0x088F
Taiwan Fuhsing	0x0CE3
Taiwan Intelligent Home Corp.	0x08E9
Taixingbang Technology (HK) Co,. LTD.	0x00D3
Taiyo Yuden Co., Ltd	0x05E4
Tamblue Oy	0x0CF9
Tandem Diabetes Care	0x059D
Tangerine, Inc.	0x014E
Tangshan HongJia electronic technology co., LTD.	0x0842
Taobao	0x01A8
Tap Sound System	0x0854
Tapcentive Inc.	0x0204
Tapkey GmbH	0x04FD
Target Corporation	0x0520
TASER International, Inc.	0x034D
taskit GmbH	0x017B
TATTCOM LLC	0x080E
tatwah SA	0x0818
TBS Electronics B.V.	0x05C9
TCL COMMUNICATION EQUIPMENT CO.,LTD.	0x0BC6
TDK Corporation	0x060D
TE Connectivity Corporation	0x08DE
TEAC Corporation	0x0C77
TeAM Hutchins AB	0x04C4
Tec4med LifeScience GmbH	0x0A13
TecBakery GmbH	0x0420
Tech-Venom Entertainment Private Limited	0x0B29
Tech4home, Lda	0x0217
Technicolor USA Inc.	0x02AF
Technocon Engineering Ltd.	0x0C8E
Technogym SPA	0x026D

Technology Solutions (UK) Ltd	0x01E6
Technosphere Labs Pvt. Ltd.	0x0918
TechSwipe	0x0CD3
TECHTICS ENGINEERING B.V.	0x0BC4
Techtronic Power Tools Technology Limited	0x02C3
Tedee Sp. z o.o.	0x0725
Teenage Engineering AB	0x0450
TEGAM, Inc.	0x05D5
TekHome	0x092B
TEKZITEL PTY LTD	0x06A5
Telecom Design	0x0B96
Telecon Mobile Limited	0x05A6
Teledyne Lecroy, Inc.	0x059A
Telemonitor, Inc.	0x017A
Telenor ASA	0x0991
Telink Semiconductor Co. Ltd	0x0211
Telit Wireless Solutions GmbH	0x008F
TEMEC Instruments B.V.	0x012C
TEMKIN ASSOCIATES, LLC	0x0A9A
Temperature Sensitive Solutions Systems Sweden AB	0x09D2
Tencent Holdings Ltd.	0x013A
Tendyron Corporation	0x02A5
Tenovis	0x002B
Tentacle Sync GmbH	0x043F
TeraTron GmbH	0x0984
TerOpta Ltd	0x0762
Tertium Technology	0x08DB
TESA SA	0x053D
Tesla, Inc.	0x022B
Teva Branded Pharmaceutical Products R&D, Inc.	0x02CE
Texas Instruments Inc.	0x000D
TGM TECHNOLOGY CO., LTD.	0x08CC
TGR 1.618 Limited	0x08A7
Thalmic Labs Inc.	0x0562
The Apache Software Foundation	0x0B65
The Chamberlain Group, Inc.	0x0878

The Coca-Cola Company	0x0794
THE EELECTRIC MACARON LLC	0x0CB6
The Energy Conservatory, Inc.	0x067A
The Goodyear Tire & Rubber Company	0x0B99
The Hablab ApS	0x06B3
The Idea Cave, LLC	0x02F1
The Indoor Lab, LLC	0x063E
The Kroger Co.	0x07AA
The L.S. Starrett Company	0x08F1
The Linux Foundation	0x05F1
The Shadow on the Moon	0x04B2
The University of Tokyo	0x01F3
The Wand Company Ltd	0x0A47
The Wildflower Foundation	0x078A
Theben AG	0x04F1
Thermo Fisher Scientific	0x0315
Thermokon-Sensortechnik GmbH	0x0C35
Thermomedics, Inc.	0x043E
ThermoWorks, Inc.	0x0B11
Thetatronics Ltd	0x0398
ThingOS GmbH & Co KG	0x07DC
Thingsquare AB	0x0391
THINKERLY SRL	0x03A9
ThinkOptics, Inc.	0x0092
Thirdwayv Inc.	0x0772
Thomas Dynamics, LLC	0x07B1
Thorley Industries, LLC	0x097C
Thornwave Labs Inc	0x04C9
THOTAKA TEKHNOLOGIES INDIA PRIVATE LIMITED	0x0CF0
Thule Group AB	0x0CFE
Ticto N.V.	0x042C
TIGER CORPORATION	0x0C39
Tile, Inc.	0x067C
Timebirds Australia Pty Ltd	0x0D0F
TimeKeeping Systems, Inc.	0x0083
Timer Cap Co.	0x015F

Timex Group USA, Inc.	0x00D6
TireCheck GmbH	0x0BA2
TiVo Corp	0x0471
Tivoli Audio, LLC	0x014A
TKH Security B.V.	0x0B20
tkLABS INC.	0x094D
ToGetHome Inc.	0x0408
TOITU CO., LTD.	0x09FB
TOKAI-DENSHI INC	0x0B58
Tokai-rika co.,ltd.	0x08BB
Token Zero Ltd	0x03A4
Tokenize, Inc.	0x083D
Tom Allebrandi Consulting	0x05A8
Tom Communication Industrial Co.,Ltd.	0x06FC
Tome, Inc.	0x0877
TomTom International BV	0x0100
tonies GmbH	0x0C8D
Toor Technologies LLC	0x057C
Topcon Positioning Systems, LLC	0x008B
TOPPAN FORMS CO.,LTD.	0x0354
Topre Corporation	0x08AC
Torrox GmbH & Co KG	0x0269
Toshiba Corp.	0x0004
TOTO LTD.	0x0A8F
TouchTronics, Inc.	0x0AB2
Touché Technology Ltd	0x06F4
ToughBuilt Industries LLC	0x0B12
TourBuilt, LLC	0x0A59
Toyo Electronics Corporation	0x05D9
TOYOTA motor corporation	0x0977
Toytec Corporation	0x0A4E
TPV Technology Limited	0x033D
TRACKTING S.R.L.	0x0C67
Trackunit A/S	0x086F
TRACMO, INC.	0x05F7
Trade FIDES a.s.	0x0681

Trainesense Ltd.	0x0424
Trakm8 Ltd	0x0238
Tramex Limited	0x05AA
Transcranial Ltd	0x0249
Transducers Direct, LLC	0x010C
Transenergooil AG	0x01C2
TransferFi	0x08B5
Transilica, Inc.	0x0018
TRANSSION HOLDINGS LIMITED	0x0942
Trapper Data AB	0x06F2
TraqFreq LLC	0x0700
Treegreen Limited	0x0874
Trek Bicycle	0x0B86
TreLab Ltd	0x00B7
Triax Technologies Inc	0x060B
Tricorder Arraay Technologies LLC	0x088B
Triductor Technology (Suzhou), Inc.	0x0C7A
TrikThom	0x0CC8
Trimble Inc.	0x03FD
Trineo Sp. z o.o.	0x01B4
Triple W Japan Inc.	0x0B75
TriTeq Lock and Security, LLC	0x06D3
Trivedi Advanced Technologies LLC	0x08B0
Trividia Health, Inc.	0x01AC
TRON Forum	0x019A
Troo Corporation	0x08FA
TROX GmbH	0x0CBC
TRSystems GmbH	0x050D
TRUE Fitness Technology	0x03E7
True Wearables, Inc.	0x0577
Trulli Audio	0x0809
Truma Gerätetechnik GmbH & Co. KG	0x0C73
Try and E CO.,LTD.	0x05F2
TSC Auto-ID Technology Co., Ltd.	0x0902
TSE BRAKES, INC.	0x0987
TSI	0x0B42

TTPCom Limited	0x001A
TTS Tooltechnic Systems AG & Co. KG	0x044F
Tucker International LLC	0x0443
Tunstall Nordic AB	0x0451
Tussock Innovation 2013 Limited	0x06B2
TVS Motor Company Ltd.	0x0CF7
Twenty Five Seven, prodaja in storitve, d.o.o.	0x0BEA
Twocanoes Labs, LLC	0x0228
twopounds gmbh	0x0C49
TWS Srl	0x06BC
txtr GmbH	0x00DA
TYKEE PTY. LTD.	0x0C16
Tymtix Technologies Private Limited	0x08F5
Typo Products, LLC	0x00FF
TYRI Sweden AB	0x0806
Tyromotion GmbH	0x0CFB
Tyto Life LLC	0x0519
Tzero Technologies, Inc.	0x0051
U-Shin Ltd.	0x08B9
Uber Technologies Inc	0x0415
Ubiquitous Computing Technology Corporation	0x0105
ubisys technologies GmbH	0x08BE
Uhlmann & Zacher GmbH	0x049D
UKC Technosolution	0x0252
ULC Robotics Inc.	0x05BD
Ultune Technologies	0x0648
umanSense AB	0x0758
UMEHEAL Ltd	0x08A5
Undagrid B.V.	0x04AC
Under Armour	0x04E3
UNEEG medical A/S	0x0C57
UNI-ELECTRONICS, INC.	0x0510
Unico RBC	0x0188
Unify Software and Solutions GmbH & Co. KG	0x0425
Unikey Technologies, Inc.	0x015E
UniqAir Oy	0x0A7B

Unisto AG	0x0AF9
Unitech Electronic Inc.	0x0AF5
Univations Limited	0x061C
Universal Audio, Inc.	0x09C2
Universal Biosensors Pty Ltd	0x0A81
Universal Electronics, Inc.	0x0093
Universidad Politecnica de Madrid	0x0D35
University of Applied Sciences Valais/Haute Ecole Valaisanne	0x025A
University of Michigan	0x02E0
Unlimited Engineering SL	0x07DE
UnSeen Technologies Oy	0x0659
unu GmbH	0x0AE5
Unwire	0x02E6
UpRight Technologies LTD	0x0735
Urban Compass, Inc	0x06C5
Urbanista AB	0x0AA7
Urbanminded Ltd	0x0805
User Hello, LLC	0x0907
USound GmbH	0x0846
UTC Fire and Security	0x01F4
UVISIO	0x09C4
Uwanna, Inc.	0x02FD
Uwatec AG	0x024A
V-ZUG Ltd	0x05CE
Vaddio	0x034A
Vakaros LLC	0x069D
Valencell, Inc.	0x0440
ValenceTech Limited	0x00FD
VALEO MANAGEMENT SERVICES	0x0C48
Valeo Service	0x01EE
Valve Corporation	0x055D
VANMOOF Global Holding B.V.	0x0A4F
VC Inc.	0x090F
Vectronix AG	0x048C
VEGA Grieshaber KG	0x044D
Velentium, LLC	0x0AEE

velocitux	0x0D27
VELUX A/S	0x06E7
VENGIT Korlatolt Felelossegu Tarsasag	0x0198
Vensi, Inc.	0x02F4
Venso EcoSolutions AB	0x066D
Venture Research Inc.	0x0A49
Verifone Systems Pte Ltd. Taiwan Branch	0x0200
verisilicon	0x05B5
Vernier Software & Technology	0x0152
Versa Group B.V.	0x0B59
Versa Networks, Inc.	0x0550
VersaMe	0x0349
Vertex International, Inc.	0x0405
Vertu Corporation Limited	0x00A2
Verve InfoTec Pty Ltd	0x0CA7
Vervent Audio Group	0x0BA4
Vessel Ltd.	0x09BE
vhf elektronik GmbH	0x0461
Viasat Group S.p.A.	0x0591
VIBRADORM GmbH	0x03B0
Vibrissa Inc.	0x050B
ViCentra B.V.	0x023D
Viceroy Devices Corporation	0x0AE0
Victron Energy BV	0x02E1
Vigil Technologies Inc.	0x06F5
VIMANA TECH PTY LTD	0x0B85
Vimar SpA	0x0760
Vinetech Co., Ltd	0x04A6
VINFAST TRADING AND PRODUCTION JOINT STOCK COMPANY	0x0BD7
Viper Design LLC	0x05E0
Vire Health Oy	0x0C99
Virscient Limited	0x08D2
VIRTUALCLINIC.DIRECT LIMITED	0x05DF
Virtuosys	0x033C
Visiontronic s.r.o.	0x0AB0
Visteon Corporation	0x00A7

Visuallex Sport International Limited	0x0ACD
Visybl Inc.	0x0112
VIT Initiative, LLC	0x04BF
Vitulo Plus BV	0x06F6
vivo Mobile Communication Co., Ltd.	0x0837
VivoSensMedical GmbH	0x09D9
Vizio, Inc.	0x0058
VIZPIN INC.	0x056E
Vocera Communications, Inc.	0x0ADE
VODALOGIC PTY LTD	0x0CE0
Vogels Products B.V.	0x0D3F
Volan Technology Inc.	0x0A0A
Volantic AB	0x016E
Volkswagen AG	0x011F
Vonkil Technologies Ltd	0x03CC
Vorwerk Elektrowerke GmbH & Co. KG	0x086E
VOS Systems, LLC	0x09A1
Vossloh-Schwabe Deutschland GmbH	0x062D
Voxx International	0x0765
Voyetra Turtle Beach	0x00D9
VSN Technologies, Inc.	0x00F7
VT42 Pty Ltd	0x0994
Vtrack Systems	0x00E9
Vuzix Corporation	0x060C
Vyassoft Technologies Inc	0x03FA
Vypin, LLC	0x04A0
Wabilogic Ltd.	0x06B5
Wacker Neuson SE	0x0BF7
WAFERLOCK	0x0A7C
Wahoo Fitness, LLC	0x01FC
WAKO CO,.LTD	0x0C65
Wally Ventures S.L.	0x0287
Walt Disney	0x0183
Wangi Lai PLT	0x0633
Wangs Alliance Corporation	0x0817
Warehouse Innovations	0x0130

WARES	0x08D8
Warner Bros.	0x0A6F
Watchdog Systems LLC	0x0C83
WatchGas B.V.	0x09F0
Water-i.d. GmbH	0x0797
WaterGuru, Inc.	0x041C
Watteam Ltd	0x03D0
WATTS ELECTRONICS	0x05CC
WavePlus Technology Co., Ltd.	0x0023
WaveWare Technologies Inc.	0x023F
Waybeyond Limited	0x07E6
Wazombi Labs OÜ	0x0370
WBS PROJECT H PTY LTD	0x0B19
Wearable Link Limited	0x0948
WeatherFlow, Inc.	0x02AE
Weba Sport und Med. Artikel GmbH	0x04B0
Webasto SE	0x0A79
Weber Sensors, LLC	0x0AFD
WEG S.A.	0x0627
Wellington Drive Technologies Ltd	0x0578
Wellinks Inc.	0x0361
Wellnomics Ltd	0x05FF
Weltek Technologies Company Limited	0x0C87
Wernher von Braun Center for ASdvanced Research	0x0706
WESCO AG	0x0C90
West Pharmaceutical Services, Inc.	0x07CB
Western Digital Techologies, Inc.	0x0867
WHERE, Inc.	0x03F5
Whirl Inc	0x0344
White Horse Scientific ltd	0x05B4
Wicentric, Inc.	0x005F
Widcomm, Inc.	0x0011
Widex A/S	0x01E0
WIKA Alexander Wiegand SE & Co.KG	0x0989
Wildlife Acoustics, Inc.	0x0730
Wiliot LTD.	0x0500

WILKA Schliesstechnik GmbH	0x06F7
Wille Engineering	0x01A6
Willowbank Electronics Ltd	0x0288
Wilo SE	0x018C
Wilson Sporting Goods	0x02C4
Wimoto Technologies Inc	0x0117
WindowMaster A/S	0x03F2
WINKEY ENTERPRISE (HONG KONG) LIMITED	0x0BDF
Wintersteiger AG	0x0883
WIOsense GmbH & Co. KG	0x0868
Wireless Cables Inc	0x0413
WirelessWERX	0x013D
WiSilica Inc.	0x0197
WISYCOM S.R.L.	0x0B38
Withings	0x03FF
Witron Technology Limited	0x00F1
Witschi Electronic Ltd	0x089F
WIZCONNECTED COMPANY LIMITED	0x0617
Wize Technology Co., Ltd.	0x0119
WIZNOVA, Inc.	0x0745
WMF AG	0x0A33
Woan Technology (Shenzhen) Co., Ltd.	0x0969
Wolf Steel ltd	0x0CDA
Wood IT Security, LLC	0x0698
Woodenshark	0x04E4
Woosim Systems Inc.	0x04FE
Workaround Gmbh	0x0B07
World Moto Inc.	0x0300
Worthcloud Technology Co.,Ltd	0x0A29
WOWTech Canada Ltd.	0x0285
Wristcam Inc.	0x05EE
WRLDS Creations AB	0x07C8
Wrmth Corp.	0x0C3D
WTO Werkzeug-Einrichtungen GmbH	0x0666
Wuhan Linptech Co.,Ltd.	0x09E2
Wuhan Woncan Construction Technologies Co., Ltd.	0x0CFD

WuQi technologies, Inc.	0x076E
Wurth Elektronik eiSos GmbH & Co. KG	0x031A
WuXi Vimicro	0x0081
www.vtracksystems.com	0x00EA
WWZN Information Technology Company Limited	0x0764
Wyler AG	0x0213
Wynd Technologies, Inc.	0x03CD
Wyze Labs, Inc	0x0870
Wyzelink Systems Inc.	0x03D5
x-Senso Solutions Kft	0x0232
XANTHIO	0x0889
Xenoma Inc.	0x093C
Xensr	0x0114
Xenter, Inc.	0x0AB6
Xi'an Fengyu Information Technology Co., Ltd.	0x0A9C
Xiamen Eholder Electronics Co.Ltd	0x0722
Xiamen Everesports Goods Co., Ltd	0x0567
Xiamen Mage Information Technology Co., Ltd.	0x07A4
Xian Yisuobao Electronic Technology Co., Ltd.	0x0C32
Xiaomi Inc.	0x038F
Xicato Inc.	0x0253
XIHAO INTELLIGENGT TECHNOLOGY CO., LTD	0x0D36
XiQ	0x03AD
Xirgo Technologies, LLC	0x0BB5
XMI Systems SA	0x0267
Xradio Technology Co.,Ltd.	0x063D
XSENSE LTD	0x0CA2
XTel Wireless ApS	0x017F
Xtrava Inc.	0x044E
XUNTONG	0x09C8
Yale	0x0BDE
Yamaha Corporation	0x0A2A
YAMAHA MOTOR CO.,LTD.	0x0CA1
Yandex Services AG	0x0905
YanFeng Visteon(Chongqing) Automotive Electronic Co.,Ltd	0x0CCD
Yardarm Technologies	0x025F

Yashu Systems	0x0C91
Yealink (Xiamen) Network Technology Co.,LTD	0x0850
Yellowcog	0x0507
Yichip Microelectronics (Hangzhou) Co.,Ltd.	0x050E
yikes	0x0161
YKK AP Inc.	0x099D
Yo-tronics Technology Co., Ltd.	0x0863
Yota Devices LTD	0x03D6
Ypsomed AG	0x0CDC
Yukai Engineering Inc.	0x0925
Yukon advanced optics worldwide, UAB	0x09EC
yupiteru	0x0C74
ZanCompute Inc.	0x04F4
Zebra Technologies Corporation	0x01F1
Zeevo, Inc.	0x0012
Zeku Technology (Shanghai) Corp., Ltd.	0x0C2C
Zen-Me Labs Ltd	0x03D8
Zencontrol Pty Ltd	0x0AA8
Zerene Inc.	0x0D37
zero1.tv GmbH	0x0098
ZF OPENMATICS s.r.o.	0x040A
ZhuHai AdvanPro Technology Company Limited	0x0656
Zhuhai Hoksi Technology CO.,LTD	0x090A
Zhuhai Jieli technology Co.,Ltd	0x05D6
Zhuhai Pantum Electronisc Co., Ltd	0x0AD4
Zhuhai Smartlink Technology Co., Ltd	0x0C79
ZifferEins GmbH & Co. KG	0x0978
ZIIP Inc	0x0B52
ZILLIOT TECHNOLOGIES PRIVATE LIMITED	0x0D34
ZIMI CORPORATION	0x08CE
Zimi Innovations Pty Ltd	0x07F1
Zintouch B.V.	0x0C55
Zipcar	0x036C
Zliide Technologies ApS	0x06DA
Zmartfun Electronics, Inc.	0x06E9
Zomm, LLC	0x0074

Zorachka LTD	0x083E
Zound Industries International AB	0x065A
ZRF, LLC	0x087A
Zscan Software	0x008D
ZTE Corporation	0x0958
Ztove ApS	0x066C
ZTR Control Systems LLC	0x0536
Zuli	0x0195
Zuma Array Limited	0x0A2E
Zume, Inc.	0x07A7
Zumtobel Group AG	0x064C
Zwift, Inc.	0x094A
ZWILLING J.A. Henckels Aktiengesellschaft	0x0BE5

8   References

[1]   3D Synchronization Profile Version 1.0.3 or later.

[2]   Audio/Video Control Transport Protocol Version 1.4 or later.

[3]   Audio/Video Distribution Transport Protocol Version 1.3 or later.

[4]   Bluetooth Core Specification Version 5.4 or later.

[5]   Bluetooth Network Encapsulation Protocol Version 1.0 or later.

[6]   Common ISDN Access Profile Version v1.0 or later.

[7]   Environmental Sensing Service Version 1.0 or later.

[8]   Extended Service Discovery Profile for UPnP Version 1.1.1 or later.

[9]   Hardcopy Cable Replacement Profile Version v1.2 or later.

[10]   Health Device Profile Version v1.1 or later.

[11]   Human Interface Device Profile Version 1.1.1 or later.

[12]   Internet Protocol Support Profile Version 1.0.0 or later.

[13]   IrDA Interoperability Version v2.0 or later.

[14]   Mesh Binary Large Object Transfer Model Version 1.0.

[15]   Mesh Device Firmware Update Model Version 1.0.

[16]   Mesh Model Version 1.0.1 or later.

[17]   Mesh Profile Version 1.0.1 or later.

[18]   Mesh Protocol Version 1.1.

[19]   Object Transfer Service Version v1.0 or later.

[20]   Personal Area Networking Profile Version v1.0 or later.

[21]   RFCOMM Version v12 or later.

[22]   Supplement to the Bluetooth Core Specification Version 10 or later.

[23]   Telephony Control Protocol Version v1.1 or later.

[24]   Unrestricted Digital Information Profile.

[25]   User Data Service Version 1.1 or later.

[26]   WAP Bearer Version v1.0 or later.