## **Sensor Tag Application: Complete Attribute Table**

TI Base UUID: F0000000-0451-4000-B000-00000000xxxx. 128-but UUIDs are typed 'bold' Type (#DEFINE) (dec) (hex) Permissions 02 (properties: read only) 03 00 (handle: 0x0003) 2 GATT\_CHARACTER\_UUID 0x2 0x2803 GATT\_PERMIT\_READ evice Name characteristic declaration 00 2A (UUID: 0x2A00) GAP\_DEVICE\_NAME\_UUID "Sensor Tag" GATT\_PERMIT\_READ Device Name characteristic value 02 (properties: read only) 05 00 (handle: 0x0005) 01 2A (UUID: 0x2A01) 0x4 0x2803 GATT CHARACTER UUID GATT PERMIT READ Appearance characteristic declaration GAP APPEARANCE UUID GATT PERMIT READ Appearance characteristic value 0x2A01 0A (properties: read/wri 07 00 (handle: 0x0007) 02 2A (UUID: 0x2A02) GATT\_CHARACTER\_UUID GATT\_PERMIT\_READ eripheral Privacy Flag characteristic declaration GATT\_PERMIT\_READ | GATT\_PERMIT\_WRITE 0x2A02 GAP\_PERI\_PRIVACY\_FLAG\_UUID 0x00 (GAP\_PRIVACY\_DISABLED) Peripheral Privacy Flag characteristic value 0A (properties: read/write) 09 00 (handle: 0x0009) GATT\_CHARACTER\_UUID GATT\_PERMIT\_READ 0x8 0x2803 Reconnection address characteristic declaration 03 2A (UUID: 0x2A03 0x2A03 GAP\_RECONNECT\_ADDR\_UUID 02 (properties: read only 0B 00 (handle: 0x000B) Peripheral Preferred Connection Parameters characteristic 0xA 10 0x2803 GATT CHARACTER UUID GATT PERMIT READ 04 2A (UUID: 0x2A04) 50 00 (100ms preferred min connection interval) A0 00 (200ms preferred max connection interval) 11 Peripheral Preferred Connection Parameters characteristic declaration 0x2A04 0xB GAP PERI CONN PARAM UUID GATT PERMIT READ E8 03 (10000ms preferred supervision timeout) 20 (properties: indicate only) 0E 00 (handle: 0x000E) 05 2A (UUID: 0x2A05) 0xD 13 0x2803 GATT CHARACTER UUID GATT PERMIT READ ervice Changed characteristic declaration 0x2A05 GATT SERVICE CHANGED UUID (null value) ervice Changed characteristic value GATT\_PERMIT\_READ | GATT\_PERMIT\_WRITE 0x2902 GATT\_CLIENT\_CHAR\_CFG\_UUID 02 (read permissions) 17 System ID GATT CHARACTER UUID 3 2A (UUID 0x2A23 naracteristic declaration DEVINFO\_SYSTEM\_ID\_UUID xx xx 00 00 xx xx xx GATT\_PERMIT\_READ 02 (read permissions) 14 00 (handle 0x0014) 19 Model Number String characteristic declaration 4 2A (UUID 0x2A24) GATT CHARACTER LILID SATT PERMIT READ GATT\_PERMIT\_READ 0x14 0x2A24 DEVINFO\_MODEL\_NUMBER\_UUID "Model Number Model Number String 02 (read permissions) 16 00 (handle 0x0016) 25 2A (UUID 0x2A25) 21 GATT\_PERMIT\_READ
GATT\_PERMIT\_READ GATT\_CHARACTER\_UUID Serial Number String DEVINEO SERIAL NUMBER LILID "Serial Number" 02 (read permissions) 23 18 00 (handle 0x0018) Firmware Revision String GATT CHARACTER UUID 6 2A (UUID 0x2A26 GATT PERMIT READ DEVINFO\_FIRMWARE\_REV\_UUII "Firmware Revision" GATT\_PERMIT\_READ Firmware Revision String 0x18 02 (read permissions) 25 20 00 (handle 0x0020) 27 2A (UUID 0x2A27) GATT CHARACTER UUID GATT PERMIT READ dware Revisi DEVINFO\_HARDWARE\_REV\_UUII 27 GATT\_PERMIT\_READ DEVINFO SOFTWARE REV UUID "Software Revision" Software Revision String 02 (read permissions) 29 anufacturer Name String 0x2803 GATT CHARACTER UUIE 2A (UUID 0x2A29 NFO\_MANUFACTURER\_NAME\_U "Manufacturer Name" GATT\_PERMIT\_READ Manufacturer Name String 02 (read permissions) 20 00 (handle 0x0020) 2A 2A (UUID 0x2A2A) 31 EEE 11073-20601 Regulatory Certification Data List GATT CHARACTER UUID SATT PERMIT READ FE 00 65 78 70 65 72 69 6D 65 6E 74 61 6C IEEE 11073-20601 Regulatory Certification Data List 0x20 0x2A2A DEVINFO\_11073\_CERT\_DATA\_UUID GATT\_PERMIT\_READ 33 ATT\_PERMIT\_READ nP ID characteristic declaration PNPID DATA UUID FE 00 65 78 70 65 72 69 6D 65 6E 74 61 6C GATT\_PERMIT\_READ PnP ID GATT\_PRIMARY\_SERVICE\_UUID 0xAA00 (IRTEMPERATURE\_SERV\_UUID ) GATT\_PERMIT\_READ Start of Sensor Profile Temperature Service 12 (properties: read/notify) 25 00 (handle: 0x0025) 01 AA (UUID: **0xAA01**) 0x2803 GATT\_CHARACTER\_UUID GATT\_PERMIT\_READ 37 0xAA01 IRTEMPERATURE DATA UUID 00:00:00:00 (4 bytes) GATT\_PERMIT\_READ ObjectLSB:ObjectMSB:AmbientLSB:Ambi GATT\_PERMIT\_READ | GATT\_PERMIT\_WRITE 0x26 0x2902 GATT CLIENT CHAR CEG LIUID 00:00 (2 bytes) Write "01:00" to enable notifications, "00:00" to disable GATT\_CHAR\_USER\_DESC\_UUI GATT PERMIT READ 0A (properties: read/write) 29 00 (handle: 0x0029) 0x28 0x2803 GATT CHARACTER UUID GATT PERMIT READ 02AA (UUID: 0xAA02) GATT\_PERMIT\_READ | Write "01" to start Sensor and Measurements, "00" to put to GATT\_PERMIT\_WRITE sleep 0xAA02 IRTEMPERATURE\_CONF\_UUID 0x2901 GATT CHAR USER DESC UU "IR Temp. Conf." (15 byt GATT\_PRIMARY\_SERVICE\_UUID 0xAA10 (ACCELEROMETER\_SERV\_UUID ) 0x2B 0x2800 GATT\_PERMIT\_READ Start of Sensor Profile Accelerometer Service 12 (properties: read/notify) 2D 00 (handle: 0x002D) GATT\_CHARACTER\_UUID GATT\_PERMIT\_READ 0x2C 0x2803 11 AA (UUID: 0xAA11) 0xAA11 GATT\_PERMIT\_READ | X : Y : Z Coordinates

GATT\_PERMIT\_READ | Write "01:00" to enable notifications, "00:00" to disable ACCELEROMETER\_DATA\_UUIE 0x2902 GATT CLIENT CHAR CFG UUID 00:00 (2 bytes) BATT CHAR USER DESC UUII "Accel. Data" (14 byte GATT PERMIT READ 0A (properties: read/wri 31 00 (handle: 0x0031) 12 AA (UUID: **0xAA12**) GATT\_CHARACTER\_UUID GATT\_PERMIT\_READ

0x31	49	0xAA12	ACCELEROMETER_CONF_UUID	1 (1 byte)	GATT_PERMIT_READ   GATT_PERMIT_WRITE	Write "01" to start Sensor and Measurements, "00" to put to sleep
0x32	50	0x2901	GATT_CHAR_USER_DESC_UUID	"Accel. Conf." (15 bytes)	GATT_PERMIT_READ	
0x33	51	0x2803	GATT_CHARACTER_UUID	0A (properties: read/write) 34 00 (handle: 0x0034) 13 AA (UUID: <b>0xAA13</b> )	GATT_PERMIT_READ	
0x34	52	0xAA13	ACCELEROMETER_PERI_UUID	1 (1 byte)	GATT_PERMIT_READ   GATT_PERMIT_WRITE	Period = [Input*10] ms, default 1000 ms, lower limit 100 ms
0x35	53	0x2901	GATT CHAR USER DESC UUID	"Acc. Period" (12 bytes)	GATT PERMIT READ	
0x36	54	0x2800	GATT_PRIMARY_SERVICE_UUID	0xAA20 (HUMIDITY_SERV_UUID )	GATT_PERMIT_READ	Start of Sensor Profile Humidity Service
0x37	55	0x2803	GATT_CHARACTER_UUID	12 (properties: read/notify) 38 00 (handle: 0x0038) 21 AA (UUID: <b>0xAA21</b> )	GATT_PERMIT_READ	
0x38 0x39	56 57	0xAA21 0x2902	HUMIDITY_DATA_UUID GATT_CLIENT_CHAR_CFG_UUID	00:00:00:00 (4 bytes) 00:00 (2 bytes)	GATT_PERMIT_READ   GATT_PERMIT_READ   GATT_PERMIT_WRITE	TempLSB:TempMSB:HumidityLSB:HumidityMSB Write "01:00" to enable notifications
0x3A 0x3B	58	0x2901 0x2803	GATT_CHAR_USER_DESC_UUID  GATT_CHARACTER_UUID	"Humid. Data" (14 bytes)  0A (properties: read/write) 3C 00 (handle: 0x003C)	GATT_PERMIT_READ  GATT_PERMIT_READ	
0x3C	59 60	0xAA22	HUMIDITY_CONF_UUID	22 AA (UUID: 0xAA22) 1 (1 byte)	GATT_PERMIT_READ   GATT_PERMIT_WRITE	Write "01" to start Sensor and Measurements, "00" to put to sleep
0x3D	61	0x2901	GATT CHAR USER DESC UUID	"Humid. Conf." (15 bytes)	GATT PERMIT READ	31000
0x3E	62	0x2800	GATT_PRIMARY_SERVICE_UUID	0xAA30 (MAGNETOMETER_SERV_UUID )	GATT_PERMIT_READ	Start of Sensor Profile Magnetometer Service
0x3F	63	0x2803	GATT_CHARACTER_UUID	12 (properties: read/notify) 40 00 (handle: 0x0040) 31 AA (UUID: <b>0xAA31</b> )	GATT_PERMIT_READ	
0x40	64	0xAA31	MAGNETOMETER_DATA_UUID	00:00:00:00:00:00 (6 bytes)	GATT_PERMIT_READ	XMSB:XLSB:YMSB:YLSB: ZMSB:ZLSB Coordinates
0x41	65	0x2902	GATT_CLIENT_CHAR_CFG_UUID	00:00 (2 bytes)	GATT_PERMIT_READ   GATT_PERMIT_WRITE	Write "01:00" to enable notifications, "00:00" to disable
0x42	66	0x2901	GATT_CHAR_USER_DESC_UUID	"Mag. Data" (10 bytes)	GATT_PERMIT_READ	
0x43	67	0x2803	GATT_CHARACTER_UUID	0A (properties: read/write) 44 00 (handle: 0x0044) 32 AA (UUID: 0xAA32)	GATT_PERMIT_READ	
0x44	68	0xAA32	MAGNETOMETER_CONF_UUID	1 (1 byte)	GATT_PERMIT_READ   GATT_PERMIT_WRITE	Write "01" to start Sensor and Measurements, "00" to put to sleep
0x45	69	0x2901	GATT CHAR USER DESC UUID	"Maq. Conf." (11 bytes)	GATT_PERMIT_WAITE	
0x46	70	0x2803	GATT_CHARACTER_UUID	0A (properties: read/write) 47 00 (handle: 0x0047) 33 AA (UUID: 0xAA33)	GATT_PERMIT_READ	
0x47 0x48	71 72	0xAA33 0x2901	MAGNETOMETER_PERI_UUID  GATT_CHAR_USER_DESC_UUID	1 (1 byte) "Mag. Period" (12 bytes)	GATT_PERMIT_READ   GATT_PERMIT_WRITE GATT_PERMIT_READ	Period = [Input*10]ms, default 2000ms, lower limit 100 ms
0x49	73	0x2800	GATT_PRIMARY_SERVICE_UUID	0xAA40 (BAROMETER_SERV_UUID )	GATT_PERMIT_READ	Start of Sensor Profile Barometer Service
0x4A	74	0x2803	GATT_CHARACTER_UUID	12 (properties: read/notify) 4B 00 (handle: 0x004B) 41 AA (UUID: <b>0xAA41</b> )	GATT_PERMIT_READ	
0x4B 0x4C	75 76	0xAA41 0x2902	BAROMETER_DATA_UUID GATT_CLIENT_CHAR_CFG_UUID	00:00:00:00 (4 bytes) 00:00 (2 bytes)	GATT_PERMIT_READ   GATT_PERMIT_WRITE	TempLSB:TempMSB:PressureLSB:PressureMSB
0x4D	77	0x2901	GATT_CHAR_USER_DESC_UUID	"Barometer Data" (15 bytes)	GATT_PERMIT_READ	
0x4E	78	0x2803	GATT_CHARACTER_UUID	0A (properties: read/write) 53 00 (handle: 0x0053) 42 AA (UUID: 0xAA42)	GATT_PERMIT_READ	
0x4F	79	0xAA42	BAROMETER_CONF_UUID	1 (1 byte)	GATT_PERMIT_READ   GATT_PERMIT_WRITE	Write "01" to start Sensor and Measurements, "00" to put to sleep, "02" to read calibration values from sensor
0x50	80	0x2901	GATT CHAR USER DESC UUID	"Barometer Conf." (16 bytes)  02 (properties: read only)	GATT PERMIT READ	
0x51	81	0x2803	GATT_CHARACTER_UUID	4F 00 (handle: 0x004F) 43 AA (UUID: 0xAA43)	GATT_PERMIT_READ	
0x52	82	0xAA43	BAROMETER_CALI_UUID	00:00::00:00 (16 bytes)	GATT_PERMIT_READ	When write 02 to Barometer Conf. has been issued, the calibration values is found here
0x53		0x2902	GATT_CLIENT_CHAR_CFG_UUID	00:00 (2 bytes)	GATT_PERMIT_READ	
0x54	83 84	0x2901	GATT_CHAR_USER_DESC_UUID	"Barometer Cali." (16 bytes)	GATT_PERMIT_WRITE GATT_PERMIT_READ	
0x55	85	0x2800	GATT_PRIMARY_SERVICE_UUID	0xAA50 (GYROSCOPE_SERV_UUID )	GATT_PERMIT_READ	Start of Sensor Profile Gyroscope Service
0x56	86	0x2803	GATT_CHARACTER_UUID	12 (properties: read/notify) 57 00 (handle: 0x0057) 51 AA (UUID: <b>0xAA51</b> )	GATT_PERMIT_READ	
0x57		0xAA51	GYROSCOPE_DATA_UUID	00:00:00:00:00:00 (6 bytes)	GATT_PERMIT_READ	XMSB:XLSB:YMSB:YLSB: ZMSB:ZLSB
0x58 0x59	88 89	0x2902 0x2901	GATT_CLIENT_CHAR_CFG_UUID GATT_CHAR_USER_DESC_UUID	00:00 (2 bytes) "Gyro. Data" (11 bytes)	GATT_PERMIT_READ   GATT_PERMIT_READ	
0x5A	90	0x2803	GATT_CHARACTER_UUID	0A (properties: read/write) 5B 00 (handle: 0x005B) 52 AA (UUID: <b>0xAA52</b> )	GATT_PERMIT_READ	
0x5B	91	0xAA52	GYROSCOPE_CONF_UUID	1 (1 byte)	GATT_PERMIT_READ   GATT_PERMIT_WRITE	Write 0 to turn off gyroscope, 1 to enable X axis only, 2 to enable Y axis only, $3 = X$ and Y, $4 = Z$ only, $5 = X$ and Z, $6 = Y$ and Z, $7 = X$ , Y and Z
0x5C	92	0x2901	GATT_CHAR_USER_DESC_UUID	"Gyro. Conf." (13 bytes)	GATT_PERMIT_READ	
0x5D	93	0x2800	GATT_SERVICE_UUID	0xFFE0 (SK_KEYPRESSED_UUID)	GATT_PERMIT_READ	Start of Simple Keys Service
0x5E	94	0x2803	GATT CHARACTER UUID	10 (notify permission) 34 00 (handle 0x0034) E1 FF (UUID 0xFFE1)	GATT_PERMIT_READ	Keys state characteristic declaration
0x5F	95	0xFFE1	SK_KEYPRESSED_UUID	0	(none) GATT PERMIT READ	Keys state characteristic value (bit mask of left / right key presses). Side key as bit 2 in test mode only.
0x60	96	0x2902	GATT_CLIENT_CHAR_CFG_UUID	0x0000	GATT_PERMIT_WRITE	
0x61	97	0x2901	GATT_CHAR_USER_DESC_UUID	"Key Press State"	GATT_PERMIT_READ  GATT_PERMIT_READ	Keys state characteristic user description Start of TestService
0x62	98	0x2800	GATT_SERVICE_UUID	0xAA60 (TEST_SERVICE_UUID)  02 (read permission) 64 00 (handle 0x0064)	GATT_PERMIT_READ	CHAIL OF LOSIONAICE
0x63		0x2803	GATT_CHARACTER_UUID	61 AA (UUID: 0xAA61)	GATT_PERMIT_READ	Test Data characteristic declaration
0x64 0x65	100 101	0xAA61 0x2901	TEST_DATA_UUID GATT_CHAR_USER_DESC_UUID	1 byte "Test Data" (10 bytes)	GATT_PERMIT_READ  GATT_PERMIT_READ	Test Data: 1 bit set of each test passed
0x66	102	0x2803	GATT_CHARACTER_UUID	OA (read/write permission) 68 00 (handle 0x0068) 62 AA (UUID: 0xAA62)	GATT_PERMIT_READ	Test Config characteristic declaration
	103					Test Config: bit 7 - enable test mode, bit 1 - set LED2, bit 0 -
0x67 0x68	104	0xAA62 0x2901	TEST_CONFIG_UUID GATT_CHAR_USER_DESC_UUID	1 byte "Test Config" (12 bytes)	GATT_PERMIT_READ GATT_PERMIT_READ	set LED 1