

BT SDK 1.4

Hardware Platform Support

	Chip	Platform Name	Notes
1	20819-A1	CYBT-213043-MESH Kit	<ul style="list-style-type: none">• 8Mb SPI Flash• 1x User Button• 1x RGB LED• Temperature Sensor (thermistor)• Ambient Light Sensor (ALS)• Motion Sensor (PIR)
2	20819-A1	CYW920819EVB-02	<ul style="list-style-type: none">• 8Mb SPI Flash• 2x User LEDs• 1x User Button• 9-Axis Motion Sensor (connected via I2C)• Temperature Sensor (thermistor)

3	20819-A1	CYBT-213043-EVAL	<ul style="list-style-type: none"> • 8Mb SPI Flash • 1x User LEDs • 1x User Button
4	20820-A1	CYW920820EVB-02	<ul style="list-style-type: none"> • 8Mb SPI Flash • 2x User LEDs • 1x User Button • 9-Axis Motion Sensor (connected via I2C) • Temperature Sensor (thermistor)
5	20721-B2	CYW920721B2EVK-01 & CYW920721B2EVK-03	<p>Base board</p> <ul style="list-style-type: none"> • 2x User LEDs • 1x User Button • 9-Axis Motion Sensor (connected via I2C) • Temperature Sensor (thermistor) <p>Audio shield board</p> <ul style="list-style-type: none"> • 4x User Buttons • analog and digital mics • audio codec

6	20820-A1	CYW989820EVB-01	CYW989820WCD1 Automotive Evaluation Board
7	20719-B2	CYW920719B2Q40EVB-01	<ul style="list-style-type: none"> • 2x User LEDs • 1x User Button • 9-Axis Motion Sensor (connected via I2C) • Temperature sensor (thermistor)

Code Examples

The CEs below are included in the BT SDK1.4.

Apps	Location	CYW920819 EVB-02	CYBT-213043-MESH	CYBT-213043-EVAL	CYW920820 EVB-02	CYW989820 EVB-01	CYW920721B2 EVK-01 & CYW920721B2 EVK-03
		20819-A1 chip			20820-A1 chip		20739-B2 chip
Demo							
BLE_Mesh_OnOffSwitch (on_off_switch) (Emulate mesh power controls using ClientControl utility)	Installed & GitHub	X	X	X	X		
BLE_Mesh_LightDimmable (light_dimmable) (Emulate mesh light using ClientControl utility)	Installed & GitHub	X	X	X	X		
BLE_Mesh_Dimmer (dimmer) (Emulate mesh light controls using ClientControl utility)	Installed & GitHub	X	X	X	X		

BLE_Mesh_SensorTemperature (sensor_temperature) (Emulate mesh Temperature Sensor using ClientControl utility)	Installed & GitHub	X	X		X		
BLE_Mesh_LightSmart (light_smart) (Emulate smart light)	GitHub	X	X	X	X		
BLE_Mesh_SensorMotion (sensor_motion) (Emulate Motion Sensor)	GitHub	X	X		X		
BLE_Mesh_LowPowerLED (low_power_led) (Emulate Low Power LED)	GitHub	X	X	X	X		
BLE_Beacon (beacon) (Beacon app for Eddestone and iBeacon)	Installed & GitHub	X		X	X	X	X
BLE_EnvironmentSensingTemperature (env_sensing_temp) (Environmental Sensing app using Environmental Sensing Service (ESS))	Installed & GitHub	X			X		
Watch (Watch reference app that demonstrates audio source, AV remote control, Apple media (AMS) and Apple notification services (ANCS))	Installed & GitHub	X			X		X
EmptyWicedBluetooth (empty_wiced_bt) (Starter bare bone app provided as template)	Installed & GitHub	X		X	X	X	X
hello_sensor (Sample peripheral app)	Installed & GitHub	X		X	X	X	X
hello_client (Sample central app)	Installed & GitHub	X		X	X	X	X
ble_keyboard (Sample application for BLE keyboard)	GitHub	X			X		
ble_mouse (Sample application for BLE mouse)	GitHub	X			X		

ble_remote (Sample application for BLE remote)	GitHub	X			X		
audio_gateway (Audio Gateway sample app)	Installed & GitHub						X
pbap_client (Phonebook Client sample app)	Installed & GitHub						X
map_client (MAP Client)	GitHub						X
low_power_20819 (Controlled Low power example)	GitHub	X		X	X	X	
low_power_sensor (Low power sensor app)	GitHub						X
Snip							
bac/bas (Battery client and server app)	GitHub	X		X	X	X	X
anc/ans (Alert Notification client and server)	GitHub	X		X	X	X	X
hrc/hrs (Heart rate client and server app)	GitHub	X		X	X		X
le_coc (Demonstrate LE connection oriented channels)	GitHub	X		X	X	X	X
HAL apps - dual_spi_master, spi_slave_sensor (Apps that demonstrate use of HAL APIs to use peripherals) -	GitHub	X			X	X	
HAL apps - ADC	GitHub	X		X	X	X	X
HAL apps - GPIO, PUART	GitHub	X		X	X	X	X
HAL apps - PWM	GitHub	X		X	X	X	
HAL apps - i2c_master	GitHub						
OTA (ota_firmware_upgrade)	GitHub	X	X		X	X	X

(Sample demonstrates how to implement secure over the air FW upgrade over BLE)							
Throughput (throughput_test) (multi lever throughput demo)	GitHub	X			X	X	
mesh (Sample apps included for power on/off, level, battery, light control, transition location, property, time, scene, scheduler, provision, and sensor (client & server).)	GitHub	X	X	X	X		
find me (BLE_FindMe) (Find Me profile example)	GitHub	X			X	X	
spp (SPP example)	GitHub	X		X	X	X	X
Host/MCU							
		OS					
Client Control (Host/MCU sample application with UI for controlling various BT applications over WICED HCI interface)	Installed	Windows, OSX, Linux					
Mesh Client Control (Host/MCU app for controlling embedded mesh apps (ClientControl and QtClientControl))	Installed	Windows, OSX, Linux					
Utilities							
BT Spy (Trace utility to view protocol and generic trace messages from the stack,profiles and app.)	Installed	Windows, OSX, Linux					
WMBT (Manufacturing test tool to test and verify the RF performance of the BT devices in WICED HCI mode)	Installed	Windows, OSX, Linux					
Peer Apps							
Mesh apps (Mesh peer apps on Android, Windows and iOS)	Installed	Android, Windows, IOS					

OTA (peer apps for OTA)	Installed	Windows, Android	
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The following middleware (libraries) are included in BT SDK1.4.

Middleware	Description	Sample App Used
<i>Grouping:</i>	<i>Bluetooth Low Energy Profile Libraries</i>	
bat_client_lib	Battery Service Client Profile library	Battery Client
beacon_lib	Library providing common beacon API support for both iBeacon and Eddystone	Beacon
hidd_lib	BLE HID Device library	BLE Remote
hrc_lib	Heart Rate Client library.	Heart Rate Client & Server
hrs_lib	Heart Rate Server library.	Heart Rate Server
anc_lib	Alert Notification Client library	Alert Notification Client
ans_lib	Alert Notification Server library	Alert Notification Server
<i>Grouping:</i>	<i>Bluetooth Protocol Libraries</i>	
avrc_controller	AVRC Controller library	Watch
avrc_target	AVRC Target library	Watch
spp_lib	Serial Port Profile library	spp app
obex_lib	Object Exchange library	pbap client app

pbap_lib	Phone Book Access Client library	pbap client app
map_lib	MAP Client library	map client app
<i>Grouping</i>	<i>Hardware Libraries</i>	
ambient_light_sensor_lib	Ambient Light Sensor library for Mesh kit (CYBT-213043-MESH)	mesh
pir_motion_sensor_lib	PIR library (Motion Sensor) for Mesh kit (CYBT-213043-MESH)	Mesh
thermistor_ncp15xv103_lib	Library providing API implementation for NCP15XV103E03RC thermistor	BLE_Mesh_SensorTemperature (CYW920819EVB-02 and CYW920820EVB-02 boards) CYW920719B2Q40EVB-01, CYW920721B2EVK-01
thermistor_ncu15wf104_lib	Library providing API implementation for NCU15WF104F60RC thermistor	BLE_Mesh_SensorTemperature (CYBT-213043-MESH board)
<i>Grouping</i>	<i>Miscellaneous</i>	
fw_upgrade_lib	Over-The-Air Firmware Upgrade support. Consists of common and chip specific library components.	Mesh Dimmer
gatt_utils_lib	BLE GATT utilities library	Battery Client
Grouping:	Application Feature	
wpl_lib	Power Estimator (CyPE) is enabled in app when application feature POWER_ESTIMATOR is set to yes.	HelloSensor, Watch

