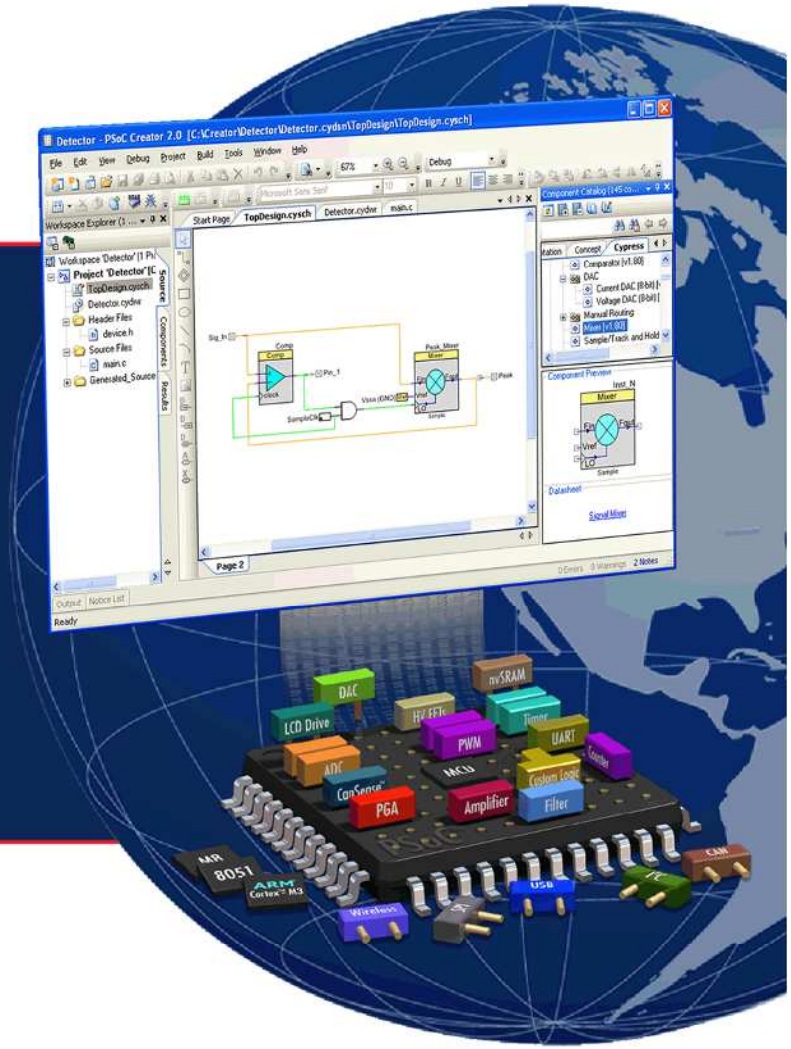
Cypress Roadmap:

Modules



#2016 Q1

Cypress Trackpad Portfolio

	Windows Trackpad Modules	Chrome Trackpad Modules	Modules for Embedded Systems
Mutual Capacitance	**Gen5 Windows PTP[1] Module** 5-Finger Detection/Communication PS2/I²C 60-Vpp[2] Charger Armor[3] **Gen5 Windows Module** **NDA Required** **Contact Sales**	**Gen5 Chrome Module** 5-Finger Detection/Communication I²C 60-Vpp[2] Charger Armor[3] **Gen6 Chrome Module** Q315 5-Finger Detection/Communication I²C 35-Vpp[2] Charger Armor[3]	**Gen6 Trackpad Module** 5-Finger Gesture[4] I²C Max Size[5]: 120 x 75 mm **Gen4 + KB[6] + RF[7] Module** 5-Finger Gesture[4] and KB[6] Scan I²C Max Size[5]: 125 x 125 mm **Gen4 + KB[6] + BLE[8] Module** **NDA Required** **Contact Sales**
Self Capacitance			**Gen2 Module** 2-Finger Gesture[4] I²C Max Size[5]: 90 x 50 mm
Software	**Windows Driver** 5-Finger Gesture[4] Windows 7/8/8.1/10 Compatible User Configuration GUI[9]	**Chrome Driver** 5-Finger Detection/Communication MT-B Compliant, Linux	

[1] Microsoft Precision Touchpad
[2] Noise voltage peak to peak
[3] System noise detection and reduction
[4] Gesture processing
[5] Maximum active sensing area
[6] Keyboard
[7] Radio frequency (2.4-GHz wireless)
[8] Bluetooth Low Energy, also known as Bluetooth Smart
[9] Graphical user interface

Production Sampling Development Concept
Status
Availability QQYY QQYY

EZ-BLE Portfolio

	Programmable Radio-on-Chip (EZ-BLE™ PRoC™)		Programmable System-on-Chip Module (EZ-BLE PSoC®)	
	128KB Flash	256KB Flash	128KB Flash	256KB Flash
Industrial Temp[1]	**CYBLE-022001-00** **EZ-BLE PRoC Module BT[5] 4.1** CM0[3], 2 SCB[4] 16 GPIOs 10 x 10 x 1.80 mm SMT[8]	**CYBLE-222005-00** Q315 **EZ-BLE PRoC Module BT 4.1** CM0, 2 SCB 16 GPIOs 10 x 10 x 1.80 mm SMT	**CYBLE-014008-00** Q315 **EZ-BLE PSoC Module BT 4.1** 4 Opamps, 1 CMP[6], 4 UDBs[7] CM0, 2 SCB,25 GPIOs 11 x 11 x 1.80 mm SMT	**CYBLE-214009-00** Q415 **EZ-BLE PSoC Module BT 4.1** 4 Opamps,1 CMP, 4 UDBs CM0, 2 SCB,25 GPIOs 11 x 11 x 1.80 mm SMT
	CYBLE-012011-00 Q315 **EZ-BLE PRoC Module BT 4.1** CM0, 2 SCB 36 GPIOs 12 x 16 x 1.80 mm SMT	**CYBLE-222014-00** Q415 **EZ-BLE PRoC Module BT 4.2** CM0, 2 SCB 16 GPIOs 10 x 10 x 1.80 mm SMT	**CYBLE-014013-10** Q415 **EZ-BLE PSoC Module BT 4.1** 4 Opamps,1 CMP, 4 UDBs CM0, 2 SCB,36 GPIOs,NS,NC 12 x 16 x 1.80 mm SMT	**CYBLE-214015-00** Q116 **EZ-BLE PSoC Module BT 4.2** 4 Opamps,1 CMP, 4 UDBs CM0, 2 SCB,25 GPIOs 11 x 11 x 1.80 mm SMT
	CYBLE-012012-10 Q315 **EZ-BLE PRoC Module BT 4.1** CM0, 2 SCB 36 GPIOs, NS[10], NC[11] 12 x 16 x 1.80 mm SMT	Q116 **CYBLE-210002-00** **EZ-BLE Serial Module BT 4.2** UART to BLE 12 x 16 x 1.80 mm SMT		
Extended Industrial Temp[2]		**CYBLE-222106-00** Q116 **EZ-BLE PRoC Module BT 4.2** CM0, 2 SCB 16 GPIOs 14 x 11 x 1.8 mm SMT		**CYBLE-224110-00** Q415 **EZ-BLE PSoC Module BT 4.1** 4 Opamps,1 CMP,4 UDBs,PA[9] CM0,2 SCB, 25 GPIOs 15.4 x 9.5 x 1.80 mm SMT
				CYBLE-224116-00 Q216 **EZ-BLE PSoC Module BT 4.2** 4 Opamps,1 CMP,4 UDBs,PA[9] CM0,2 SCB, 25 GPIOs 15.4 x 9.5 x 1.80 mm SMT

Integration

[1] Range of -40° C to +85° C
[2] Range of -40° C to +105° C
[3] ARM® Cortex® -M0
[4] Serial communication block
[5] Bluetooth Specification Version
[6] Comparator
[7] Universal Digital Block
[8] Surface mount technology
[9] Power Amplifier
[10] NS = No Shield
[11] NC = No Certifications

	Production	Sampling	Development	Concept
Status				
Availability	QQYY	QQYY		

Gen5 Chrome Module

Application

Chromebook PCs

Features

Mechanical Construction

Maximum active sensing area of 125 mm x 70 mm
Minimum of 1.3 mm total module thickness
Clickpad[1] and standard[2] configurations
Overlay assembly and lamination available

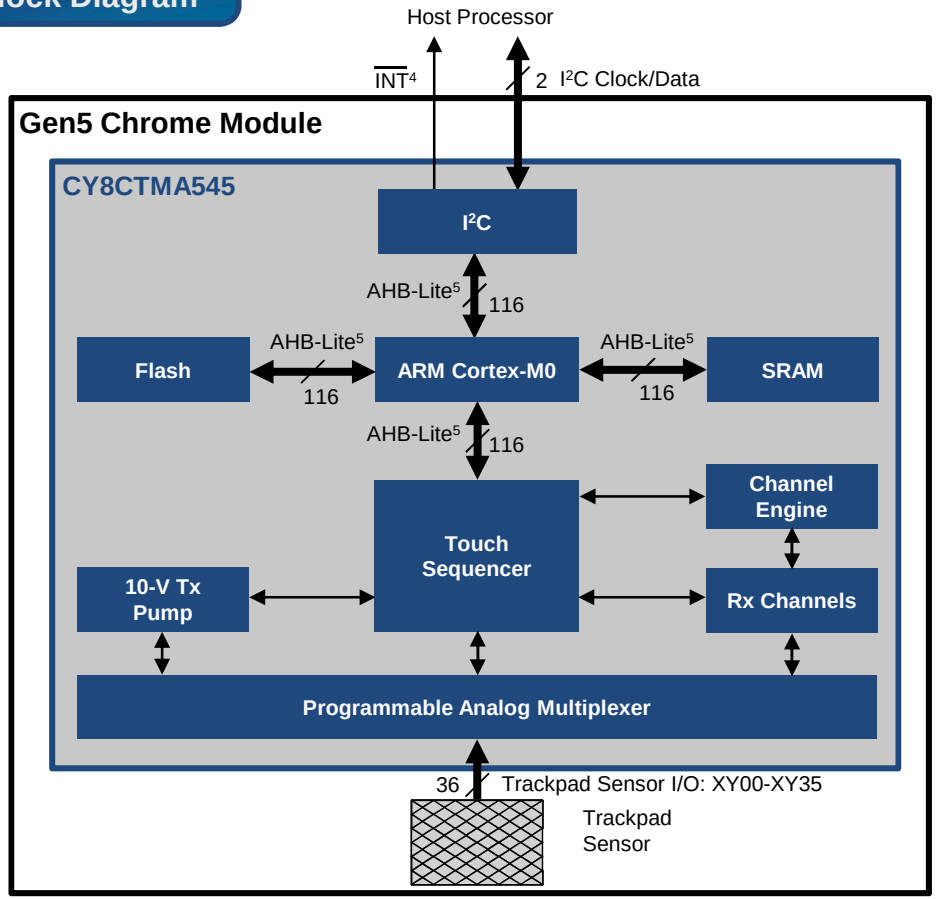
Advanced Processing

60-Vpp[3] charger noise immunity (1-500 kHz, 9-mm finger)
32-bit ARM® Cortex™-M0 core for more processing power
I²C communication interface
Report rates up to 150 Hz
Five-finger detection and communication
Low-power, look-for-touch active mode
Google-qualified multi-touch Cypress driver
Compatible with Google Multi-touch Protocol B (MT-B)

Product Support

On-site support for customer product introduction available
Incoming/outgoing test equipment available to customers

Block Diagram



Collateral

Datasheet: Contact Sales

Availability

Production: Now

[1] Trackpad with integrated mechanical button
[2] Trackpad with support for external mechanical button inputs
[3] Noise voltage peak to peak
[4] Interrupt
[5] Advanced High-Performance Bus Lite

Gen6 Chrome Module

Application

Chromebook PCs

Features

Mechanical Construction

Maximum active sensing area of 120 mm x 75 mm
Minimum of 1.3 mm total module thickness
Clickpad[1] and standard[2] configurations
Overlay assembly and lamination available

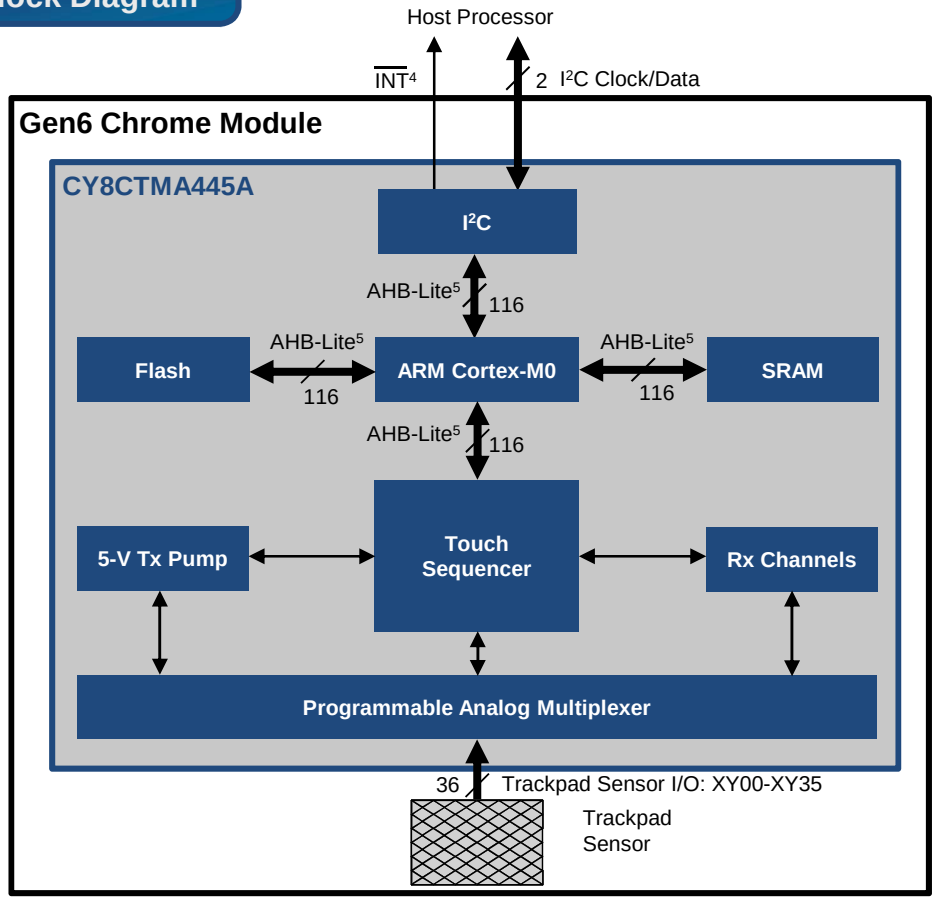
Advanced Processing

35-Vpp[3] charger noise immunity (1-500 kHz, 9-mm finger)
32-bit ARM® Cortex™-M0 core for more processing power
I²C communication interface
Report rates up to 150 Hz
Five-finger detection and communication
Low-power, look-for-touch active mode
Google-qualified multi-touch Cypress driver
Compatible with Google Multi-touch Protocol B (MT-B)

Product Support

On-site support for customer product introduction available
Incoming/outgoing test equipment available to customers

Block Diagram



Collateral

Datasheet: Contact Sales

Availability

Sampling: Now
Production: Q4 2015

[1] Trackpad with integrated mechanical button
[2] Trackpad with support for external mechanical button inputs
[3] Noise voltage peak to peak
[4] Interrupt
[5] Advanced High-Performance Bus Lite

Gen5 Windows PTP[1] Module

Application

Windows PCs

Features

Mechanical Construction

Maximum active sensing area of 125 mm x 70 mm
Minimum of 1.3 mm total module thickness
Clickpad[2] and standard[3] configurations
Overlay assembly and lamination available

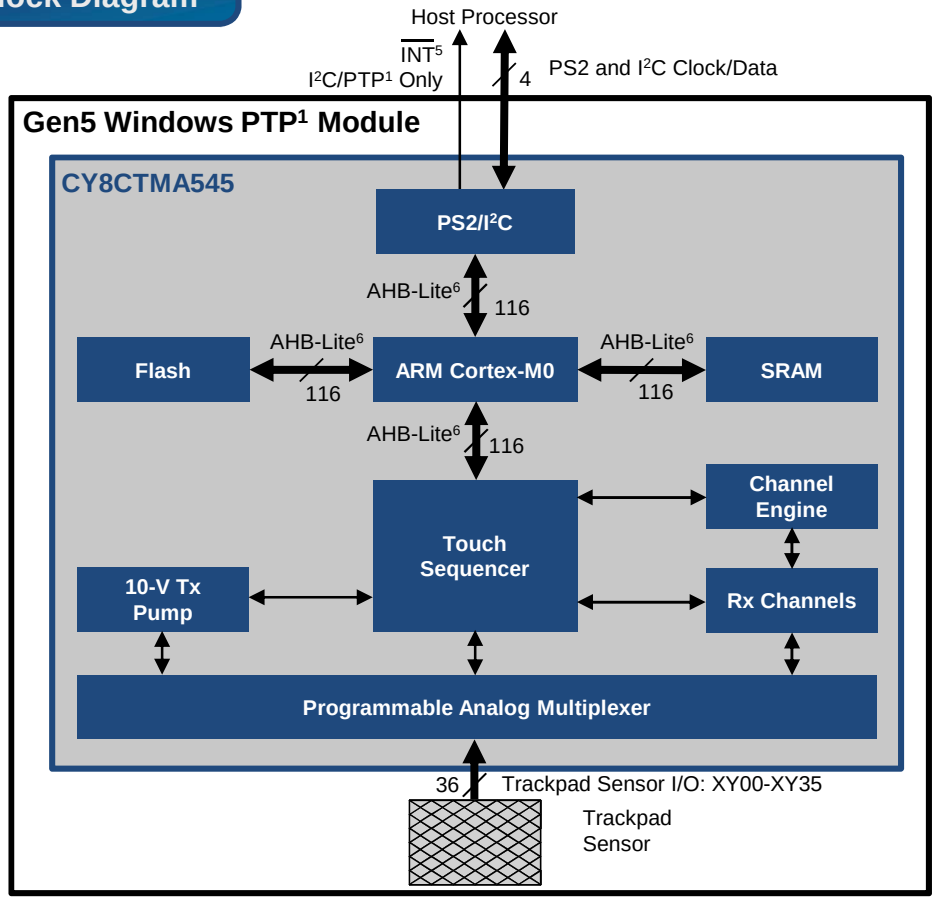
Advanced Processing

60-Vpp[4] charger noise immunity (1-500 kHz, 9-mm finger)
32-bit ARM Cortex-M0 core for more processing power
Dual bus interface PS2 and I²C/PTP[1]
Report rates of up to 150 Hz
Enhanced palm rejection
Five-finger detection and communication
Low-power, look-for-touch active mode
Windows driver support for 7/8/8.1/10

Product Support

On-site support for customer product introduction available
Incoming/outgoing test equipment available to customers

Block Diagram



Collateral

Datasheet: Contact Sales

Availability

Production: Now

[1] Microsoft Precision Touchpad
[2] Trackpad with integrated mechanical button
[3] Trackpad with support for external mechanical button inputs
[4] Noise voltage peak to peak
[5] Interrupt
[6] Advanced High-Performance Bus Lite

Gen4 + KB[1] + RF[2] Module

Wireless Trackpad + Keyboard Solution

Applications

External keyboard and trackpad
Standalone trackpad
Remote control and trackpad
Tablet keyboard dock and trackpad

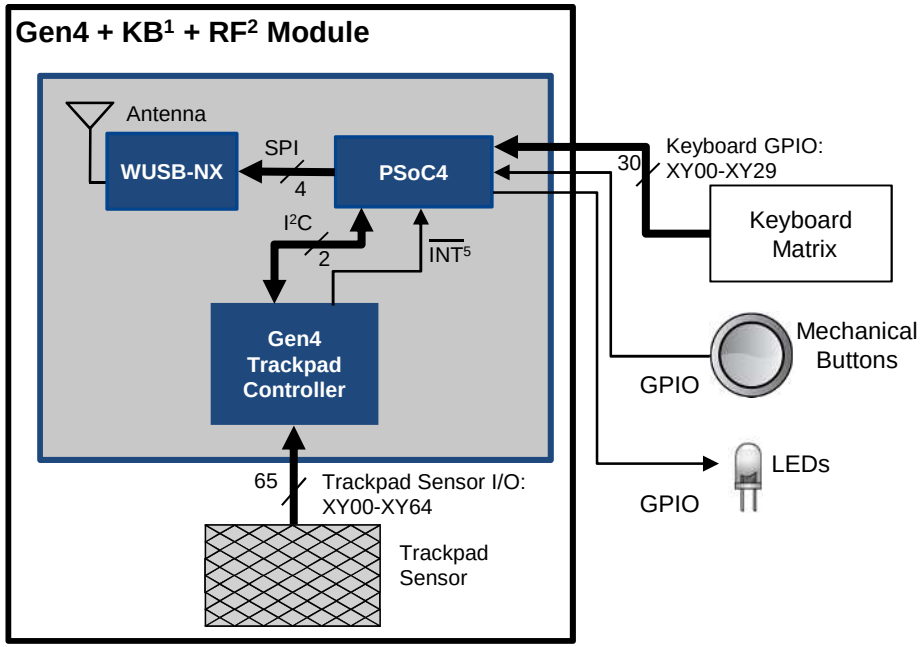
Features

Mechanical Construction
Maximum active sensing area of 125 mm x 125 mm
Clickpad[3] and standard[4] configurations
Overlay assembly and lamination available

Advanced Processing
32-bit ARM Cortex-M0 core for more processing power
Five-finger detection and communication
Software-free solution allowing fast time-to-market
Embedded gesture detection
Six configurable power modes
2.4-GHz wireless communication
Cypress PSoC4A supporting keyboard scan
Optional LED control

Product Support
Simplification of OEM/ODM supply chains
Incoming/outgoing test equipment available to customers

Block Diagram



Collateral

Datasheet: Contact Sales

Availability

Production: Now

[1] Keyboard
[2] Radio frequency (2.4-GHz wireless)
[3] Trackpad with integrated mechanical button
[4] Trackpad with support for external mechanical button inputs
[5] Interrupt

EZ-BLE PRoC Module CYBLE-022001-00

Bluetooth Low Energy Module using PRoC BLE

Applications

BLE[1] connectivity
Medical
Industrial
PC accessories
Toys
Smartphone accessories

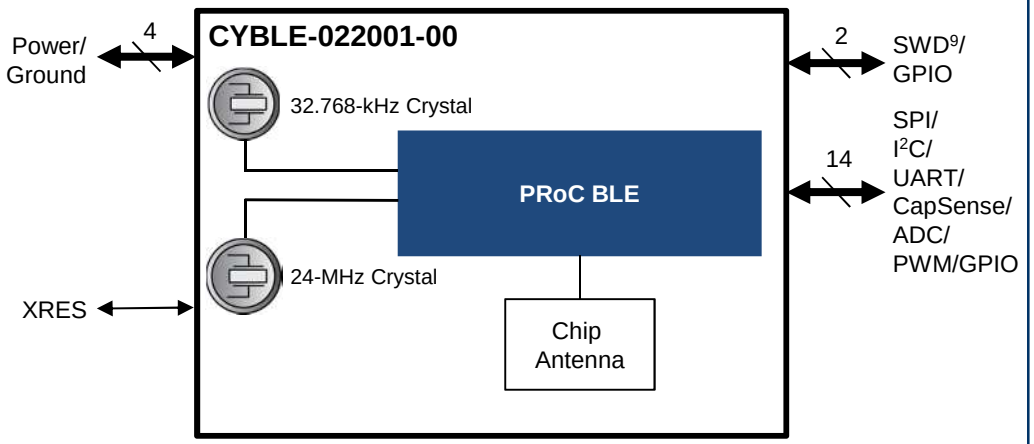
Features

Qualification and Certification:
Bluetooth SIG QDID[2]
FCC[3], CE[4], KC[5], MIC[6] and IC[7]
Small Footprint:
10 mm x 10 mm x 1.8 mm, 21-pad SMT with 16 GPIO
Bluetooth Smart Connectivity with Bluetooth 4.1:
2.4-GHz BLE radio and baseband
-91-dBm Rx sensitivity, +3-dBm Tx output power
Power Modes:
1.3-µA Deep-Sleep, 150-nA Hibernate, 60-nA Stop
Highly Integrated Solution:
Two crystals, chip antenna, passives, shield
CYBLE-022001-EVAL Adapter Board Interface:
Easy interface to CY8CKIT-042-BLE Pioneer Kit
Enables testing of CapSense, buttons, GPIOs, OTA[8]

Availability

Sampling: Now
Production: Now

Block Diagram



Collateral

EZ-BLE PRoC Module Datasheet
PRoC BLE Datasheet
Getting Started Application Note
PSoC Creator
PSoC Programmer
CySmart[10] Windows Host Emulation Tool
CySmart iOS and Android Apps

[1] Bluetooth Low Energy, also known as Bluetooth Smart
[2] Bluetooth Special Interest Group Qualification Design ID
[3] Federal Communications Commission
[4] Conformité Européenne (Europe)
[5] Korea Certification
[6] Ministry of Internal Affairs and Communications (Japan)
[7] Industry Canada
[8] Over-the-Air
[9] Serial wire debug communication protocol
[10] A GUI-based software tool that installs on your PC to test and debug BLE functionality; also available in iOS and Android mobile applications