

PANASONIC Bluetooth Modules & Mesh Networks



Make Your Product Powered by Panasonic

Modules That Exceed Expectations! Panasonic Electronic Components provides powerful, highly flexible, cost effective RF Modules for a wide variety of Wireless Personal Area Network (PAN) applications. New extended range products and small footprints combined with network firmware flexibility make Panasonic an industry leader in the development of cutting edge RF Module technology.

BLUETOOTH RF MODULES

Panasonic's unique Easy-To-Use (ETU) series of modules, plug directly into evaluation kits with the added benefit of header connectors that simplify prototype wiring and field trials. Based on IEEE 802.15.1, Bluetooth was developed for the purpose of sending larger amounts of data quickly from computers to PDAs to cell phones or other portable handheld devices. Key features include high data rate, frequency hopping, very small form factor and modest power consumption.



RoHS Compliant

Series	Receiver Sensitivity (BER=10 ⁻³)	Output Power	Power Supply	Ultra Low Power Mode	eSCO Link 2-EV3	EDR 3-DH1 / 3-DH5	ACL (connected DH5)	ACL (connected DH1)	Operating Temperature Range
PAN1323ETU	-93 dBm	10 dBm	1.7 - 4.8 V	135 uA	-	33 mA	-	-	-20°C to +70°C
PAN1326	-93 dBm	10.5 dBm typ.	1.7 - 4.8 V	135 uA	8.3 mA	39.2 mA	-	-	-20°C to +70°C
PAN1720	-94 dBm	+3 dBm typ.	2.0 - 3.6 V	0.5uA	-	-	-	-	-40°C to +85°C
PAN1315	-93 dBm	10.5 dBm typ.	1.7-4.8V	135 uA	8.3 mA	39.2 mA	-	-	-20°C to +70°C
PAN1555	-86 dBm	+4 dBm typ.	2.7-3.6V	<100 uA	-	-	50.5 mA to 49.5 mA	48.0 mA to 46.0 mA	-40°C to +85°C
PAN1455	-86 dBm	+4 dBm typ.	2.7-3.6V	<100 uA	-	-	50.5 mA to 49.5 mA	48.0 mA to 46.0 mA	-40°C to +85°C

PAN1323ETU

Panasonic's new development tool for entire PAN13xx product line. A single development module for three standards: Bluetooth Classic, Bluetooth Low Energy and ANT.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Description	Price Each		
				1	250	500
667-ENW89825A2JF	ENW89825A2JF	A	PAN1322ETU Triple Mode Development Module	47.90	36.30	34.50

PAN1326

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Description	Price Each		
				1	250	500
667-ENW89823A2JF	ENW89823A2JF	B	PAN1326 CC2564 BT+ BLE, HCI Module	20.72	14.06	13.70

PAN1327/1317

Dual-Mode ANT™ and Wireless Bluetooth® Connectivity

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Description	Price Each		
				1	250	500
667-ENW-89827A2JF	ENW-89827A2JF	C	PAN1327, CC2567, Bluetooth & ANT, HCI module, antenna	23.16	-	-
667-ENW-89827C2JF	ENW-89827C2JF	D	PAN1317, CC2567, Bluetooth & ANT, HCI module, no antenna	22.18	-	-

PAN1720

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Description	Price Each		
				1	250	500
667-ENW89820A1KF	ENW89820A1KF	E	PAN1720 CC2540 2.4GH HCI Mod Antenna	22.18	16.08	15.58

PAN1311

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Description	Price Each		
				1	250	500
667-ENW-89811K4CF	ENW-89811K4CF	F	Module contains integrated controller, antenna and Bluetooth transceiver	20.52	14.71	12.93
667-EVAL-PAN1321	EVAL-PAN1321	G	Evaluation Board for ENW-89811K4CF module	554.17	-	-

PAN1315ETU

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Description	Price Each		
				1	250	500
667-EVAL-PAN1315	EVAL-PAN1315	H	Evaluation Kit, Includes TI MSP430 Controller	330.51	-	-

PAN1315

Panasonic's new PAN1315 Host Controlled Interface (HCI) Bluetooth RF module brings Texas Instrument's seventh generation Bluetooth core integrated circuit, the CC2560, to an easy to use module format. This module has been designed to be 100% pin compatible with the next generation of Bluetooth Low Energy devices. This unique design feature enables designers to seamlessly transition between Bluetooth Classic and Low Energy modules.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Description	Price Each		
				1	250	500
667-ENW-89818C2JF	ENW-89818C2JF	I	CC2560 HCI Module, No Antenna	14.41	10.15	9.49

PAN1455

The new PAN1455 Bluetooth module series is also based on Cambridge Silicon Radio's BlueCore6-ROM (BC06). The PAN1455 is excellent for projects requiring an external antenna. The new PAN1455 Bluetooth module series include on-board microcontrollers that optionally include multiple BT profiles, including SPP, HSP, HFP and HDP.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Description	Price Each		
				1	250	500
667-ENW89815C3KF	ENW89815C3KF	J	PAN1455, CSR, BC06, SPP Profile	35.52	27.50	25.11

PAN1555

The new PAN1555 Bluetooth module series is based upon Cambridge Silicon Radio's BlueCore6-ROM (BC06). The PAN1555 includes an integrated ceramic antenna. The product delivers greater simplicity of use, lower power consumption and enhanced security along with an on-board microcontrollers that optionally include multiple BT profiles, including SPP, HSP, HFP and HDP.

MOUSER STOCK NO.	Panasonic Part No.	Fig.	Description	Price Each		
				1	250	500
667-EVAL-PAN1555	EVAL-PAN1555	J	EVAL-PAN1555, Evaluation Kit - Stollmann	485.19	-	-
667-ENW89815A3KF	ENW89815A3KF	J	PAN1555, CSR, BC06, SPP Profile, Integrated Antenna	36.90	28.59	26.28

802.15.4 MESH NETWORKS

A wireless mesh network based on the SNAP® (Synapse Network Application Protocol) software stack is instant-on, self-forming, and self-healing. Creating applications to run on the nodes forming the network is fast, efficient, updated over-the-air, and does not require embedded programming skills. In fact, users can administer and manage a SNAP based network without actually having to know anything about the details of wireless networks. This approach makes wireless technology accessible to a much broader range of users, including monitoring and control in consumer, commercial, industrial, and government markets. Uses range from building automation (lighting, security, HVAC) to industrial control and machine communication, medical monitoring, security applications and home automation.

The PAN4561 is a brand new extended range 2.4GHz, ISM, SNAP® software enabled RF module with an industry-leading small footprint size of 35mm x 15mm x 3.5mm!

PAN4561 802.15.4 Extended Range 2.4GHz ISM RF Module

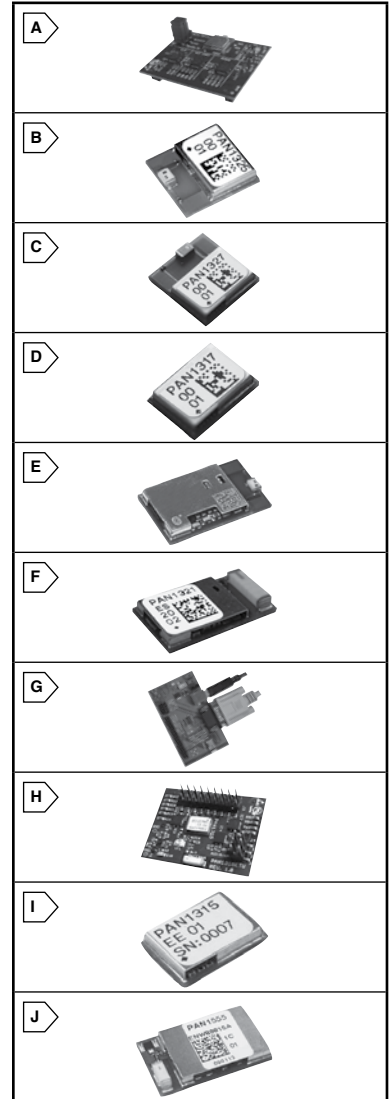
For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Description	Price Each		
			1	250	500
667-EVAL-PAN4561	EVAL-PAN4561	Evaluation Kit PAN4561 (Synapse)	390.30	-	-
667-ENWC9A30A4EF	ENWC9A30A4EF	Evaluation Module with Ceramic Antenna SNAP FW	55.00	-	-

PAN4555 802.15.4 Short Range Low Power 2.4GHz ISM Band Transceiver

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Description	Price Each		
			1	250	500
667-EVAL-PAN4555	EVAL-PAN4555	802.15.4, EVAL-PAN4555, Evaluation Kit PAN4555 (Synapse)	390.30	-	-
667-EVAL-PAN4555ETU	EVAL-PAN4555ETU	802.15.4, EVAL-PAN4555ETU, PAN4555 Evaluation Module	47.01	-	-
667-ENWC9A08A4EF	ENWC9A08A4EF	802.15.4, 8 bit Ceramic Antenna, SNAP FW	26.04	20.18	17.90



RoHS Compliant