










Wireless Modules

Product Overview

Category	Bluetooth 2.0 (2.1) EDR			Dual Mode	BT & ANT	BLE	Bluetooth 2.1 EDR Modem		
Module Picture									
Name Type Others	PAN1310/20 (no/with antenna) 2.1 EDR - HCI	PAN1311/21 (no/with antenna) 2.0 EDR - SPP	PAN1315/25 (no/with antenna) 2.1 EDR - HCI	PAN1316/26 (no/with antenna) 2.1 EDR - HCI	PAN1317/27 (no/with antenna) 2.1 EDR - HCI	PAN1720 Bluetooth Low Energy	PAN1455 2.0 EDR SPP, HID, HDP,...	PAN1555 2.0 EDR SPP, HID, HDP,...	PAN1560 2.1 EDR HDP, 11073
Size [mm]	11.6 x 8.7 x 1.8 15.6 x 8.7 x 2.8	11.6 x 8.7 x 1.8 15.6 x 8.7 x 2.8	9 x 6.5 x 1.7 9 x 9.5 x 1.7	9 x 6.5 x 1.7 9 x 9.5 x 1.7	9 x 6.5 x 1.7 9 x 9.5 x 1.7	15.6 x 8.7 x 1.8	18,8 x 13.5 x 2.5	22.8 x 13.5 x 2.5	25 x 15 x 2.8
Used ICs	PMB8763	PMB8753/2	CC2560	CC2564	CC2567	CC2540 / (41)	BC6 / STM32F103	BC6 / STM32F103	BC05MM
Status	Mass Production	Mass Production	Mass Production	Engin. Samples	Engin. Samples	Samples 01/2011	Mass Production	Mass Production	Engin. Samples
Rx Sensitivity [dBm]	-86 @BER 10 ⁻³	-86 @BER 10 ⁻³	-93 @BER 10 ⁻³	-93 @BER 10 ⁻³	-93 @BER 10 ⁻³	-3 @BER 10 ⁻³	-86 @BER 10 ⁻³	-86 @BER 10 ⁻³	-90 @BER 10 ⁻³
Tx Power (max.)	+4 dBm	+4 dBm	+10.5 dBm	+10.5 dBm	+10.5 dBm	+3 dBm	+4 dBm	+4 dBm	+6.5 dBm
Operating Temp.	-40 to +85°C	-40 to +70(85)°C	-40 to +85°C	-40 to +85°C	-40 to +85°C	-40 to +85°C	-40 to +85°C	-40 to +85°C	-40 to +85°C
Power Supply	2.7 to 3.6 V	2.7 to 3.6 V	1.8 to 4.8 V	1.8 to 4.8 V	1.8 to 4.8 V	2.0 to 3.6 V	2.7 to 3.6 V	2.7 to 3.6 V	2.5 to 3.6 V
Current consumt.	80 µA (sleep) 40 mA (Tx,EDR)	80 µA (sleep) 40 mA (Tx,EDR)	135 µA (sleep) 40 mA (Tx,EDR)	135 µA (sleep) 40 mA (Tx,EDR)	135 µA (sleep) 40 mA (Tx,EDR)	Tx23mA @ -6dBm Rx18mA, Sleep<1µA	<100 µA (sleep) 47 mA (ACL; DH1)	<100 µA (sleep) 47 mA (ACL; DH1)	< 70 µA (sleep) 45 mA (Tx,EDR)
Frequency Range	2.4 GHz	2.4 GHz	2.4 GHz	2.4 GHz	2.4 GHz	2.4 GHz	2.4 GHz	2.4 GHz	2.4 GHz
Number of GPIO's	>15	>15	2	2	2	19	18	18	18
Interfaces	GPIO, PCM, UART, JTAG	GPIO, UART, JTAG	GPIO, PCM, UART	GPIO, PCM, UART	GPIO, PCM, UART	GPIO, UART (USB)	GPIO, UART, I ² C, SPI, ADC	GPIO, UART, I ² C, SPI, ADC	GPIO, UART, SPI, USB, SPK, MIC
Data Rate (max. air)	3 MBit/s (brutto) 2170 kBit/s (netto)	3 MBit/s (brutto) 190 kBit/s (netto)	3 MBit/s (brutto)	3 MBit/s (brutto)	3 MBit/s (brutto)	1 MBit/s	3 MBit/s (brutto) ca. 500 kBit/s (netto)	3 MBit/s (brutto) ca. 500 kBit/s (netto)	3 MBit/s (brutto) 2170 kBit/s (netto)

Design and specifications are subject to change without notice. Ask the factory for technical specifications before purchase and/or use. If there is any doubt regarding the safety of this product, kindly inform us immediately for technical consultation.