



BDE Technology

Enabling Green Wireless IoT

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Sub-1GHz

WiFi

Bluetooth SMART

zigbee

THREAD

5G

NB-IoT

Your Partner for IoT Wireless Technologies

Module	Part Number	Chip	Connectivity	Industrial Grade Operation Temp.	Dimension	Current Consumption	RF Performance	Antenna	Certification	Comments
Bluetooth & Wi-Fi Combo										
	BDE-BW3301NP1	CC3301	Wi-Fi 6, Bluetooth Low Energy 5.2	NO -40°C to 85°C	13.3mm x 13.4mm x 2mm	Wi-Fi: 260mA@WiFi@+19dBm@MCS0 HE 66mA@WiFi@RX BLE: 240uA@Advertise@1s Interval 110uA@Connection@1s Interval	Tx: 20dBm at 1DSSS 19dBm at HE MCS0 Rx: -98dBm at 1 DSSS -88dBm at HE MCS0	Pad	Bluetooth FCC IC CE-RED TELEC *Pre-release *On going	Pin-to-pin compatible w/ TI WL1837MOD
	BDE-BW3301UP1	CC3301	Wi-Fi 6, Bluetooth Low Energy 5.2	NO -40°C to 85°C	18.4mm x 13.3mm x 2mm	Wi-Fi: 260mA@WiFi@+19dBm@MCS0 HE 66mA@WiFi@RX BLE: 240uA@Advertise@1s Interval 110uA@Connection@1s Interval	Tx: 20dBm at 1DSSS 19dBm at HE MCS0 Rx: -98dBm at 1 DSSS -88dBm at HE MCS0	U.FL	Bluetooth FCC IC CE-RED TELEC *Pre-release *On going	Pin-to-pin compatible w/ TI WL1837MOD, with U.FL connector
	BDE-BW3301AP1	CC3301	Wi-Fi 6, Bluetooth Low Energy 5.2	NO -40°C to 85°C	18.4mm x 13.3mm x 2mm	Wi-Fi: 260mA@WiFi@+19dBm@MCS0 HE 66mA@WiFi@RX BLE: 240uA@Advertise@1s Interval 110uA@Connection@1s Interval	Tx: 20dBm at 1DSSS 19dBm at HE MCS0 Rx: -98dBm at 1 DSSS -88dBm at HE MCS0	PCB	Bluetooth FCC IC CE-RED TELEC *Pre-release *On going	Pin-to-pin compatible w/ TI WL1837MOD, with integrated PCB antenna
	BDE-BW3301NP1M2	CC3301	Wi-Fi 6, Bluetooth Low Energy 5.2	NO -40°C to 85°C	30mm x 22mm x 2.8mm	Wi-Fi: 260mA@WiFi@+19dBm@MCS0 HE 66mA@WiFi@RX BLE: 240uA@Advertise@1s Interval 110uA@Connection@1s Interval	Tx: 20dBm at 1DSSS 19dBm at HE MCS0 Rx: -98dBm at 1 DSSS -88dBm at HE MCS0	PCB	Bluetooth FCC IC CE-RED TELEC *Pre-release *On going	M.2 card
	BDE-BW2837	WL1837	Wi-Fi 5-GHz & 2.4-GHz Dual-Band, Bluetooth 5.1 Dual-Mode	NO -40°C to 85°C	13.3mm x 13.4mm x 2mm	Wi-Fi: 510mA@WiFi@2.4-GHz@TX 20M MIMO MCS15 329mA@WiFi@5-GHz@TX 20M SISO 54 OFDM	Tx: 2.4 GHz: 17.3dBm at 1DSSS 5 GHz: 18dBm at 6 OFDM Rx: 2.4 GHz: -95dBm at 1 DSSS 5 GHz: -92.5dBm at 6 OFDM	Pad	Bluetooth FCC IC CE-RED TELEC	Pin-to-pin compatible w/ TI WL1837MOD
	BDE-BW20C	CC3235 + CC2652P	Wi-Fi 5-GHz & 2.4-GHz Dual-Band, BLE 5.2/ ZigBee/ Thread/ IEEE802.15.4/ 6LoWPAN/ Wi-SUN	NO -40°C to 85°C	29mm x 29mm x 2.3mm	Wi-Fi: 272mA@2.4GHz@16dBm@1DSSS 318mA@5GHz@15.1dBm@6OFDM BLE/ZigBee: 0.94uA@Standby 6.9mA@RX 7.3mA@TX@0dBm 9.6mA@TX@5dBm 22mA@TX@10dBm 85mA@TX@20dBm	Tx: 2.4 GHz: 16dBm at 1DSSS 5 GHz: 15.1dBm at 6 OFDM Rx: 2.4 GHz: -94.5dBm at 1 DSSS 5 GHz: -89dBm at 6 OFDM	Chip or U.FL	Bluetooth FCC IC CE-RED *On going	
Wi-Fi										
	BDE-WF3235SFN32	CC3235SF	Wi-Fi 5-GHz & 2.4-GHz Dual-Band	NO -40°C to 85°C	17.5mm x 20.5mm x 2.4mm	RX traffic (MCU active): 59 mA TX traffic (MCU active): 223 mA	Tx: 2.4 GHz: 16dBm at 1 DSSS 5 GHz: 15.1dBm at 6 OFDM Rx: 2.4 GHz: -94.5dBm at 1 DSSS 5 GHz: -89dBm at 6 OFDM	Pad	FCC IC CE-RED	WF3235SFN32, WF3235SN32, WF3235SFN32, WF3235SN32, WF3135N, are pin-to-pin compatible w/ TI CC3135MOD, CC3235MODS, CC3235MODSF
	BDE-WF3235SFA32	CC3235SF	Wi-Fi 5-GHz & 2.4-GHz Dual-Band	NO -40°C to 85°C	23mm x 20.5mm x 2.4mm	RX traffic (MCU active): 59 mA TX traffic (MCU active): 223 mA	Tx: 2.4 GHz: 16dBm at 1 DSSS 5 GHz: 15.1dBm at 6 OFDM Rx: 2.4 GHz: -94.5dBm at 1 DSSS 5 GHz: -89dBm at 6 OFDM	PCB	FCC IC CE-RED	WF3235SFA32, WF3235SFAU32, WF3235SA32, WF3235SAU32, WF3230SFA32, WF3230SFAU32, WF3230SA32, WF3230SAU32, WF3135A, WF3135AU are pin-to-pin compatible w/ TI CC3235MODASF, CC3235MODAS

Module	Part Number	Chip	Connectivity	Industrial Grade Operation Temp.	Dimension	Current Consumption	RF Performance	Antenna	Certification	Comments
	BDE-WF3235SFAU32	CC3235SF	Wi-Fi 5-GHz & 2.4-GHz Dual-Band	NO -40°C to 85°C	23mm x 20.5mm x 2.4mm	RX traffic (MCU active): 59 mA TX traffic (MCU active): 223 mA	TX: 2.4 GHz: 16dBm at 1 DSSS 5 GHz: 15.1dBm at 6 OFDM RX: 2.4 GHz: -94.5dBm at 1 DSSS 5 GHz: -89dBm at 6 OFDM	U.FL	FCC IC CE-RED	WF3235SFA32, WF3235SFAU32, WF3235SA32, WF3235SAU32, WF3230SFA32, WF3230SFAU32, WF3230SA32, WF3230SAU32, WF3135A, WF3135AU are pin-to-pin compatible w/ TI CC3235MODASF, CC3235MODAS
	BDE-WF3235SN32	CC3235S	Wi-Fi 5-GHz & 2.4-GHz Dual-Band	NO -40°C to 85°C	17.5mm x 20.5mm x 2.4mm	RX traffic (MCU active): 59 mA TX traffic (MCU active): 223 mA	TX: 2.4 GHz: 16dBm at 1 DSSS 5 GHz: 15.1dBm at 6 OFDM RX: 2.4 GHz: -94.5dBm at 1 DSSS 5 GHz: -89dBm at 6 OFDM	Pad	FCC IC CE-RED	WF3235SN32, WF3235SN32, WF3230SN32, WF3230SN32, WF3135N, are pin-to-pin compatible w/ TI CC3135MOD, CC3235MODS, CC3235MODSF
	BDE-WF3235SA32	CC3235S	Wi-Fi 5-GHz & 2.4-GHz Dual-Band	NO -40°C to 85°C	23mm x 20.5mm x 2.4mm	RX traffic (MCU active): 59 mA TX traffic (MCU active): 223 mA	TX: 2.4 GHz: 16dBm at 1 DSSS 5 GHz: 15.1dBm at 6 OFDM RX: 2.4 GHz: -94.5dBm at 1 DSSS 5 GHz: -89dBm at 6 OFDM	PCB	FCC IC CE-RED	WF3235SFA32, WF3235SFAU32, WF3235SA32, WF3235SAU32, WF3230SFA32, WF3230SFAU32, WF3230SA32, WF3230SAU32, WF3135A, WF3135AU are pin-to-pin compatible w/ TI CC3235MODASF, CC3235MODAS
	BDE-WF3235SAU32	CC3235S	Wi-Fi 5-GHz & 2.4-GHz Dual-Band	NO -40°C to 85°C	23mm x 20.5mm x 2.4mm	RX traffic (MCU active): 59 mA TX traffic (MCU active): 223 mA	TX: 2.4 GHz: 16dBm at 1 DSSS 5 GHz: 15.1dBm at 6 OFDM RX: 2.4 GHz: -94.5dBm at 1 DSSS 5 GHz: -89dBm at 6 OFDM	U.FL	FCC IC CE-RED	WF3235SFA32, WF3235SFAU32, WF3235SA32, WF3235SAU32, WF3230SFA32, WF3230SFAU32, WF3230SA32, WF3230SAU32, WF3135A, WF3135AU are pin-to-pin compatible w/ TI CC3235MODASF, CC3235MODAS
	BDE-WF3230SFN32	CC3230SF	Wi-Fi 5-GHz & 2.4-GHz Dual-Band	NO -40°C to 85°C	17.5mm x 20.5mm x 2.4mm	RX traffic (MCU active): 59 mA TX traffic (MCU active): 223 mA	TX: 18dBm at 1 DSSS 14.5dBm at 54OFDM RX: -96dBm at 1 DSSS -74.5dBm at 54OFDM	PAD	FCC IC CE-RED <i>*On going</i>	WF3235SN32, WF3235SN32, WF3230SN32, WF3230SN32, WF3135N, are pin-to-pin compatible w/ TI CC3135MOD, CC3235MODS, CC3235MODSF
	BDE-WF3230SFA32	CC3230SF	Wi-Fi 5-GHz & 2.4-GHz Dual-Band	NO -40°C to 85°C	23mm x 20.5mm x 2.4mm	RX traffic (MCU active): 59 mA TX traffic (MCU active): 223 mA	TX: 18dBm at 1 DSSS 14.5dBm at 54OFDM RX: -96dBm at 1 DSSS -74.5dBm at 54OFDM	PCB	FCC IC CE-RED <i>*On going</i>	WF3235SFA32, WF3235SFAU32, WF3235SA32, WF3235SAU32, WF3230SFA32, WF3230SFAU32, WF3230SA32, WF3230SAU32, WF3135A, WF3135AU are pin-to-pin compatible w/ TI CC3235MODASF, CC3235MODAS
	BDE-WF3230SFAU32	CC3230SF	Wi-Fi 5-GHz & 2.4-GHz Dual-Band	NO -40°C to 85°C	23mm x 20.5mm x 2.4mm	RX traffic (MCU active): 59 mA TX traffic (MCU active): 223 mA	TX: 18dBm at 1 DSSS 14.5dBm at 54OFDM RX: -96dBm at 1 DSSS -74.5dBm at 54OFDM	U.FL	FCC IC CE-RED <i>*On going</i>	WF3235SFA32, WF3235SFAU32, WF3235SA32, WF3235SAU32, WF3230SFA32, WF3230SFAU32, WF3230SA32, WF3230SAU32, WF3135A, WF3135AU are pin-to-pin compatible w/ TI CC3235MODASF, CC3235MODAS

Module	Part Number	Chip	Connectivity	Industrial Grade Operation Temp.	Dimension	Current Consumption	RF Performance	Antenna	Certification	Comments
	BDE-WF3220SN32	CC3220S	Wi-Fi 5-GHz & 2.4-GHz Dual-Band	NO -40°C to 85°C	17.5mm x 20.5mm x 2.4mm	RX traffic (MCU active): 223 mA TX traffic (MCU active): 223 mA	TX: 17dBm at 1 DSSS 13.5dBm at 54OFDM RX: -95dBm at 1 DSSS -73.5dBm at 54OFDM	PAD	FCC IC CE-RED *On going	WF3235SFN32, WF3235SN32, WF3230SFN32, WF3230SN32, WF3135N, are pin-to-pin compatible w/ TI CC3135MOD, CC3235MODS, CC3235MODSF
	BDE-WF3220SA32	CC3220S	Wi-Fi 5-GHz & 2.4-GHz Dual-Band	NO -40°C to 85°C	23mm x 20.5mm x 2.4mm	RX traffic (MCU active): 59 mA TX traffic (MCU active): 223 mA	TX: 17dBm at 1 DSSS 13.5dBm at 54OFDM RX: -95dBm at 1 DSSS -73.5dBm at 54OFDM	PCB	FCC IC CE-RED *On going	WF3235SFA32, WF3235SFA32, WF3235SA32, WF3235SAU32, WF3230SFA32, WF3230SFA32, WF3230SA32, WF3230SAU32, WF3135A, WF3135AU are pin-to-pin compatible w/ TI CC3235MODASF, CC3235MODAS
	BDE-WF3220SAU32	CC3220S	Wi-Fi 5-GHz & 2.4-GHz Dual-Band	NO -40°C to 85°C	23mm x 20.5mm x 2.4mm	RX traffic (MCU active): 59 mA TX traffic (MCU active): 223 mA	TX: 17dBm at 1 DSSS 13.5dBm at 54OFDM RX: -95dBm at 1 DSSS -73.5dBm at 54OFDM	U.FL	FCC IC CE-RED *On going	WF3235SFA32, WF3235SFA32, WF3235SA32, WF3235SAU32, WF3230SFA32, WF3230SFA32, WF3230SA32, WF3230SAU32, WF3135A, WF3135AU are pin-to-pin compatible w/ TI CC3235MODASF, CC3235MODAS
	BDE-WF3135N	CC3135	Wi-Fi 5-GHz & 2.4-GHz Dual-Band	NO -40°C to 85°C	17.5mm x 20.5mm x 2.4mm	RX traffic (MCU active): 59 mA TX traffic (MCU active): 223 mA	TX: 2.4 GHz: 17dBm at 1DSSS 5 GHz: 15.1dBm at 6OFDM RX: 2.4 GHz: -94.5dBm at 1 DSSS 5 GHz: -89dBm at 6 OFDM	PAD	FCC IC CE-RED	WF3235SFN32, WF3235SN32, WF3230SFN32, WF3230SN32, WF3135N, are pin-to-pin compatible w/ TI CC3135MOD, CC3235MODS, CC3235MODSF
	BDE-WF3135A	CC3135	Wi-Fi 5-GHz & 2.4-GHz Dual-Band	NO -40°C to 85°C	23mm x 20.5mm x 2.4mm	RX traffic (MCU active): 59 mA TX traffic (MCU active): 223 mA	TX: 2.4 GHz: 16dBm at 1DSSS 5 GHz: 15.1dBm at 6OFDM RX: 2.4 GHz: -94.5dBm at 1 DSSS 5 GHz: -89dBm at 6 OFDM	PCB	FCC IC CE-RED	WF3235SFA32, WF3235SFA32, WF3235SA32, WF3235SAU32, WF3230SFA32, WF3230SFA32, WF3230SA32, WF3230SAU32, WF3135A, WF3135AU are pin-to-pin compatible w/ TI CC3235MODASF, CC3235MODAS
	BDE-WF3135AU	CC3135	Wi-Fi 5-GHz & 2.4-GHz Dual-Band	NO -40°C to 85°C	23mm x 20.5mm x 2.4mm	RX traffic (MCU active): 59 mA TX traffic (MCU active): 223 mA	TX: 2.4 GHz: 16dBm at 1DSSS 5 GHz: 15.1dBm at 6OFDM RX: 2.4 GHz: -94.5dBm at 1 DSSS 5 GHz: -89dBm at 6 OFDM	U.FL	FCC IC CE-RED	WF3235SFA32, WF3235SFA32, WF3235SA32, WF3235SAU32, WF3230SFA32, WF3230SFA32, WF3230SA32, WF3230SAU32, WF3135A, WF3135AU are pin-to-pin compatible w/ TI CC3235MODASF, CC3235MODAS
Bluetooth Dual Mode										
	BDE-BDM209A	MSP432+ CC2564C	Bluetooth 5.2 BR/EDR & BLE Dual Mode	NO -40°C to 85°C	12mm x 22mm x 2.15mm	MCU W/ BT Shutdown -Active: 80 μA/MHz -Low-frequency active: 83 μA at 128 kHz -LPM4.5: 25nA 41.2mA@EDRfullthrt 114uA@BLE Adv 169uA@BLEconnected	TX: 10dBm RX: -93dBm	Chip or U.FL	Bluetooth FCC IC CE-RED TELEC KC NCC Austria New Zealand SRRC	

Module	Part Number	Chip	Connectivity	Industrial Grade Operation Temp.	Dimension	Current Consumption	RF Performance	Antenna	Certification	Comments
	BDE-BD2564CA	CC2564C	Bluetooth 5.2 BR/EDR & BLE Dual Mode	NO -40°C to 85°C	7mm x 14mm x 1.55 mm	41.2mA@EDRfullthrt 114uA@BLE Adv 169uA@BLEConnectd	TX: 8dBm RX: -93dBm	Chip or U.FL	Bluetooth FCC IC CE-RED TELEC	Pin-to-pin compatible w/ TI CC2564MODA
	BDE-BD2564CN	CC2564C	Bluetooth 5.2 BR/EDR & BLE Dual Mode	NO -40°C to 85°C	7mm x 7mm x 1.55 mm	41.2mA@EDRfullthrt 114uA@BLE Adv 169uA@BLEConnectd	TX: 8dBm RX: -93dBm	PAD	Bluetooth FCC IC CE-RED TELEC	Pin-to-pin compatible w/ TI CC2564MODA
Multi-Band & Multi-Protocol										
	BDE-MB1354P101UA/ UU/UN/NA/NU/ NN	CC1354P 10	2.4G/ Sub-1G/ BLE 5.2/ ZigBee/ Thread/ IEEE802.15.4/ 6LoWPAN/ Wi-SUN	NO -40°C to 85°C	29.86mm x 19.98mm x 2.15mm	0.84uA@Standby 5.8mA@RX 8.0mA@TX@0dBm 63mA@TX@20dBm (3.3V, 868MHz) 85mA@TX@20dBm (3.0V, 2.4G)	TX: 20dBm RX: -121dBm for SimpleLink long-range mode, -110dBm at 50 kbps, -105dBm for Bluetooth 125 kbps	2.4G: PCB or U.FL or PAD 915/868MHz: U.FL or PAD (6 variants)	Bluetooth FCC IC CE-RED	PA on Sub1G 20dBm Sub1G TX 5dBm 2.4G TX; pin-to-pin compatible with BDE-RFM208P, BDE-RFM208-IN, BDE-RFM208, BDE-RFM207P
	BDE-MB1354P102UA/ UU/UN/NA/NU/ NN	CC1354P 10	2.4G/ Sub-1G/ BLE 5.2/ ZigBee/ Thread/ IEEE802.15.4/ 6LoWPAN/ Wi-SUN	NO -40°C to 85°C	29.86mm x 19.98mm x 2.15mm	0.84uA@Standby 5.8mA@RX 8.0mA@TX@0dBm 63mA@TX@20dBm (3.3V, 868MHz) 85mA@TX@20dBm (3.0V, 2.4G)	TX: 20dBm RX: -121dBm for SimpleLink long-range mode, -110dBm at 50 kbps, -105dBm for Bluetooth 125 kbps	2.4G: PCB or U.FL or PAD 915/868MHz: U.FL or PAD (6 variants)	Bluetooth FCC IC CE-RED	PA on 2.4G 14dBm Sub1G TX 20dBm 2.4G TX; pin-to-pin compatible with BDE-RFM208P, BDE-RFM208-IN, BDE-RFM208, BDE-RFM207P
	BDE-MB1352P71UA/ UU/UN/NA/NU/ NN	CC1352P 7	2.4G/ Sub-1G/ BLE 5.2/ ZigBee/ Thread/ IEEE802.15.4/ 6LoWPAN/ Wi-SUN	NO -40°C to 85°C	29.86mm x 19.98mm x 2.15mm	0.84uA@Standby 5.8mA@RX 8.0mA@TX@0dBm 63mA@TX@20dBm (3.3V, 868MHz) 85mA@TX@20dBm (3.0V, 2.4G)	TX: 20dBm RX: -121dBm for SimpleLink long-range mode, -110dBm at 50 kbps, -105dBm for Bluetooth 125 kbps	2.4G: PCB or U.FL or PAD 915/868MHz: U.FL or PAD (6 variants)	Bluetooth FCC IC CE-RED	PA on Sub1G 20dBm Sub1G TX 5dBm 2.4G TX; pin-to-pin compatible with BDE-RFM208P, BDE-RFM208-IN, BDE-RFM208, BDE-RFM207P
	BDE-MB1352P72UA/ UU/UN/NA/NU/ NN	CC1352P 7	2.4G/ Sub-1G/ BLE 5.2/ ZigBee/ Thread/ IEEE802.15.4/ 6LoWPAN/ Wi-SUN	NO -40°C to 85°C	29.86mm x 19.98mm x 2.15mm	0.84uA@Standby 5.8mA@RX 8.0mA@TX@0dBm 63mA@TX@20dBm (3.3V, 868MHz) 85mA@TX@20dBm (3.0V, 2.4G)	TX: 20dBm RX: -121dBm for SimpleLink long-range mode, -110dBm at 50 kbps, -105dBm for Bluetooth 125 kbps	2.4G: PCB or U.FL or PAD 915/868MHz: U.FL or PAD (6 variants)	Bluetooth FCC IC CE-RED	PA on 2.4G 14dBm Sub1G TX 20dBm 2.4G TX; pin-to-pin compatible with BDE-RFM208P, BDE-RFM208-IN, BDE-RFM208, BDE-RFM207P
	BDE-RFM208P-S1	CC1352P	2.4G/ Sub-1G/ BLE 5.2/ ZigBee/ Thread/ IEEE802.15.4/ 6LoWPAN/ Wi-SUN	NO -40°C to 85°C	29.86mm x 19.98mm x 2.15mm	0.84uA@Standby 5.8mA@RX 8.0mA@TX@0dBm 63mA@TX@20dBm (3.3V, 868MHz) 85mA@TX@20dBm (3.0V, 2.4G)	TX: 20dBm RX: -121dBm for SimpleLink long-range mode, -110dBm at 50 kbps, -105dBm for Bluetooth 125 kbps	2.4G: PCB or U.FL or PAD 915/868MHz: U.FL or PAD	Bluetooth FCC IC CE-RED	PA on Sub1G 20dBm Sub1G TX 5dBm 2.4G TX; BDE-RFM208P, BDE-RFM208-IN, BDE-RFM208, BDE-RFM207P are pin-to-pin compatible
	BDE-RFM208P-2.4	CC1352P	2.4G/ Sub-1G/ BLE 5.2/ ZigBee/ Thread/ IEEE802.15.4/ 6LoWPAN/ Wi-SUN	NO -40°C to 85°C	29.86mm x 19.98mm x 2.15mm	0.84uA@Standby 5.8mA@RX 8.0mA@TX@0dBm 63mA@TX@20dBm (3.3V, 868MHz) 85mA@TX@20dBm (3.0V, 2.4G)	TX: 20dBm RX: -121dBm for SimpleLink long-range mode, -110dBm at 50 kbps, -105dBm for Bluetooth 125 kbps	2.4G: PCB or U.FL or PAD 915/868MHz: U.FL or PAD	Bluetooth FCC IC CE-RED	PA on 2.4G 19.5dBm 2.4G TX 12dBm Sub1G TX; BDE-RFM208P, BDE-RFM208-IN, BDE-RFM208, BDE-RFM207P are pin-to-pin compatible

Module	Part Number	Chip	Connectivity	Industrial Grade Operation Temp.	Dimension	Current Consumption	RF Performance	Antenna	Certification	Comments
	BDE-RFM208-IN	CC1352R	2.4G/ Sub-1G/ BLE 5.2/ ZigBee/ Thread/ IEEE802.15.4/ 6LoWPAN/ Wi-SUN	YES -40°C to 85°C Long life, Low error rate	29.86mm x 19.98mm x 2.15mm	0.84uA@Standby 5.8mA@RX 8.0mA@TX@0dBm 24.9mA@TX@14dBm	TX: 14dBm (Sub-1 GHz) 5dBm (2.4 GHz) RX: -121dBm for SimpleLink long- range mode, -110dBm at 50 kbps, -105dBm for Bluetooth 125 kbps	2.4G: PCB or U.FL or PAD 915/868MHz: U.FL or PAD	Bluetooth FCC IC CE-RED	BDE-RFM208P, BDE-RFM208-IN, BDE-RFM208, BDE-RFM207P are pin-to-pin compatible
	BDE-RFM208	CC1352R	2.4G/ Sub-1G/ BLE 5.2/ ZigBee/ Thread/ IEEE802.15.4/ 6LoWPAN/ Wi-SUN	NO -40°C to 85°C	29.86mm x 19.98mm x 2.15mm	0.84uA@Standby 5.8mA@RX 8.0mA@TX@0dBm 24.9mA@TX@14dBm	TX: 14dBm (Sub-1 GHz) 5dBm (2.4 GHz) RX: -121dBm for SimpleLink long- range mode, -110dBm at 50 kbps, -105dBm for Bluetooth 125 kbps	2.4G: PCB or U.FL or PAD 915/868MHz: U.FL or PAD	Bluetooth FCC IC CE-RED	BDE-RFM208P, BDE-RFM208-IN, BDE-RFM208, BDE-RFM207P are pin-to-pin compatible
Multi-Protocol										
	BDE-MP2674R10A	CC2674R10	BLE 5.2/ ZigBee/ IEEE802.15.4/ TI 15.4 stack/ Thread/ Matter/ 6LoWPAN	NO -40°C to 85°C	22.95mm x 15mm x 2.2mm	0.8uA@Standby 6.4mA@RX 7.1mA@TX@0dBm 9.5mA@TX@5dBm	TX: 5dBm RX: -103dBm for Bluetooth 125 kbps	PCB	Bluetooth FCC IC CE-RED	PA version 20dBm Tx power, pin-to-pin compatible with BDE-RFM207-IN, BDE- RFM207, BDE- RFM207B, BDE- BLEM205-IN, BDE- BLEM205, BDE- BLEM205-Q1
	BDE-MP2674P10(A/U/N)32	CC2674P10	BLE 5.2/ ZigBee/ IEEE802.15.4/ TI 15.4 stack/ Thread/ Matter/ 6LoWPAN	NO -40°C to 85°C	29.86mm x 19.98mm x 2.15mm	0.8uA@Standby 6.4mA@RX 7.1mA@TX@0dBm 9.5mA@TX@5dBm 22mA@TX@10dBm 101mA@TX@20dBm	TX: 20dBm RX: -104dBm for Bluetooth 125 kbps	PCB or U.FL or Pad	Bluetooth FCC IC CE-RED	PA version 20dBm Tx power, pin-to-pin compatible with BDE-RFM208P, BDE- RFM208-IN, BDE- RFM208, BDE- RFM207P when using 2.4GHz, integrated on- board 32Mbit SPI flash by choice
	BDE-MP2651P3A(U/N)	CC2651P3	BLE 5.2/ ZigBee/ IEEE802.15.4/ TI 15.4 stack	NO -40°C to 85°C	29.86mm x 19.98mm x 2.15mm	0.8uA@Standby 6.4mA@RX 7.1mA@TX@0dBm 9.5mA@TX@5dBm 22mA@TX@10dBm 101mA@TX@20dBm	TX: 20dBm RX: -104dBm for Bluetooth 125 kbps	PCB or U.FL or Pad	Bluetooth FCC IC CE-RED	PA version 20dBm Tx power, pin-to-pin compatible with BDE-RFM208P, BDE- RFM208-IN, BDE- RFM208, BDE- RFM207P when using 2.4GHz
	BDE-MP2651R3A	CC2651R3	BLE 5.2/ ZigBee/ IEEE802.15.4/ TI 15.4 stack	NO -40°C to 85°C	22.95mm x 15mm x 2.2mm	0.8uA@Standby 6.4mA@RX 7.1mA@TX@0dBm 9.5mA@TX@5dBm	TX: 5dBm RX: -103dBm for Bluetooth 125 kbps	PCB	Bluetooth FCC IC CE-RED	PA version 20dBm Tx power, pin-to-pin compatible with BDE-RFM207-IN, BDE- RFM207, BDE- RFM207B, BDE- BLEM205-IN, BDE- BLEM205, BDE- BLEM205-Q1
	BDE-MP2652R7A	CC2652R7	BLE 5.2/ ZigBee/ Thread/ IEEE802.15.4/ 6LoWPAN/ Wi-SUN	NO -40°C to 85°C	22.95mm x 15mm x 2.2mm	0.94uA@Standby 6.9mA@RX 7.3mA@TX@0dBm 9.6mA@TX@5dBm	TX: 5dBm RX: -105dBm	PCB		Pin-to-pin compatible with BDE-RFM207-IN, BDE-RFM207, BDE- RFM207B, BDE- BLEM205-IN, BDE- BLEM205, BDE- BLEM205-Q1
	BDE-MP2652P7(A/U/N)32	CC2652P7	BLE 5.2/ ZigBee/ Thread/ IEEE802.15.4/ 6LoWPAN/ Wi-SUN	NO -40°C to 85°C	29.86mm x 19.98mm x 2.15mm	0.94uA@Standby 6.9mA@RX 7.3mA@TX@0dBm 9.6mA@TX@5dBm 22mA@TX@10dBm 85mA@TX@20dBm	TX: 20dBm RX: -100dBm for 802.15.4, -105dBm for Bluetooth 125 kbps	PCB or U.FL or Pad	Bluetooth FCC IC CE-RED	PA version 20dBm Tx power pin-to-pin compatible with BDE-RFM208P, BDE- RFM208-IN, BDE- RFM208, BDE- RFM207P, integrated on-board 32Mbit SPI flash by choice
	BDE-RFM207P	CC2652P	BLE 5.2/ ZigBee/ Thread/ IEEE802.15.4/ 6LoWPAN/ Wi-SUN	NO -40°C to 85°C	29.86mm x 19.98mm x 2.15mm	0.94uA@Standby 6.9mA@RX 7.3mA@TX@0dBm 9.6mA@TX@5dBm 22mA@TX@10dBm 85mA@TX@20dBm	TX: 20dBm RX: -100dBm for 802.15.4, -105dBm for Bluetooth 125 kbps	PCB	Bluetooth FCC IC CE-RED	PA version 20dBm Tx power BDE-RFM208P, BDE- RFM208-IN, BDE- RFM208, BDE- RFM207P, are pin-to- pin compatible

Module	Part Number	Chip	Connectivity	Industrial Grade Operation Temp.	Dimension	Current Consumption	RF Performance	Antenna	Certification	Comments
	BDE-RFM207-IN	CC2652R	BLE 5.2/ ZigBee/ Thread/ IEEE802.15.4/ 6LoWPAN/ Wi-SUN	YES -40°C to 85°C Long life, Low error rate	22.95mm x 15mm x 2.2mm	0.94uA@Standby 6.9mA@RX 7.3mA@TX@0dBm 9.6mA@TX@5dBm	TX: 5dBm RX: -105dBm	PCB	Bluetooth FCC IC CE-RED	BDE-RFM207-IN, BDE-RFM207B, BDE-BLEM205-IN, BDE-BLEM205, BDE-BLEM205-Q1 are pin-to-pin compatible
	BDE-RFM207	CC2652R	BLE 5.2/ ZigBee/ Thread/ IEEE802.15.4/ 6LoWPAN/ Wi-SUN	NO -40°C to 85°C	22.95mm x 15mm x 2.2mm	0.94uA@Standby 6.9mA@RX 7.3mA@TX@0dBm 9.6mA@TX@5dBm	TX: 5dBm RX: -105dBm	PCB	Bluetooth FCC IC CE-RED	BDE-RFM207-IN, BDE-RFM207B, BDE-BLEM205-IN, BDE-BLEM205, BDE-BLEM205-Q1 are pin-to-pin compatible
	BDE-RFM207B	CC2652R	BLE 5.2/ ZigBee/ Thread/ IEEE802.15.4/ 6LoWPAN/ Wi-SUN	NO -40°C to 85°C	22.95mm x 15mm x 2.2mm	0.94uA@Standby 6.9mA@RX 7.3mA@TX@0dBm 9.6mA@TX@5dBm	TX: 5dBm RX: -105dBm	PCB	Bluetooth FCC IC CE-RED	BDE-RFM207-IN, BDE-RFM207B, BDE-BLEM205-IN, BDE-BLEM205, BDE-BLEM205-Q1 are pin-to-pin compatible
	BDE-MP2652RSIPA	CC2652RS IP	BLE 5.2/ ZigBee/ Thread/ IEEE802.15.4/ 6LoWPAN/ Wi-SUN	NO -40°C to 85°C	15mm x 12.9mm x 2.2mm	0.94uA@Standby 6.9mA@RX 7.3mA@TX@0dBm 9.6mA@TX@5dBm	TX: 5dBm RX: -105dBm	Chip	Bluetooth FCC IC CE-RED <i>*On going</i>	
Bluetooth Low Energy										
	BDE-LE2340R5KPA/u	CC2340R5	BLES.2	NO -40°C to 85°C	15mm x 12mm x 2mm	Shutdown: 150nA (Wake up on external events) Standby: 0.7uA (RTC running, 36KB RAM) 5.3mA@RX 5.0mA@TX@0dBm 12.0mATX@8dBm	TX: Up to 8dBm RX: -102dBm	Chip or U.FL	Bluetooth FCC IC CE-RED <i>*On going</i>	
	BDE-LE2640R2FA0	CC2640R2F	BLE 5.1	NO -40°C to 85°C	16.9mm x 11mm x 2.1mm	Shutdown: 100nA (Wake up on external events) Standby: 1.5uA (RTC running and RAM/CPU retention)	TX: -21dBm to 5dBm RX: -97dBm	Chip	Bluetooth FCC IC CE-RED <i>*On going</i>	LE2640R2FA0, LE2640R2FA4, LE2640R2FA8, LE2640R2FAU0, LE2640R2FAU4, LE2640R2FAU8, LE2640R2LA0, LE2640R2LA4, LE2640R2LA8, LE2640R2LAU0, LE2640R2LAU4, LE2640R2LAU8 are pin-to-pin compatible
	BDE-LE2640R2FA4	CC2640R2F	BLE 5.1	NO -40°C to 85°C	16.9mm x 11mm x 2.1mm	Shutdown: 100nA (Wake up on external events) Standby: 1.5uA (RTC running and RAM/CPU retention)	TX: -21dBm to 5dBm RX: -97dBm	Chip	Bluetooth FCC IC CE-RED <i>*On going</i>	LE2640R2FA0, LE2640R2FA4, LE2640R2FA8, LE2640R2FAU0, LE2640R2FAU4, LE2640R2FAU8, LE2640R2LA0, LE2640R2LA4, LE2640R2LA8, LE2640R2LAU0, LE2640R2LAU4, LE2640R2LAU8 are pin-to-pin compatible
	BDE-LE2640R2FA8	CC2640R2F	BLE 5.1	NO -40°C to 85°C	16.9mm x 11mm x 2.1mm	Shutdown: 100nA (Wake up on external events) Standby: 1.5uA (RTC running and RAM/CPU retention)	TX: -21dBm to 5dBm RX: -97dBm	Chip	Bluetooth FCC IC CE-RED <i>*On going</i>	LE2640R2FA0, LE2640R2FA4, LE2640R2FA8, LE2640R2FAU0, LE2640R2FAU4, LE2640R2FAU8, LE2640R2LA0, LE2640R2LA4, LE2640R2LA8, LE2640R2LAU0, LE2640R2LAU4, LE2640R2LAU8 are pin-to-pin compatible

Module	Part Number	Chip	Connectivity	Industrial Grade Operation Temp.	Dimension	Current Consumption	RF Performance	Antenna	Certification	Comments
	BDE-LE2640R2FAU0	CC2640R2F	BLE 5.1	NO -40°C to 85°C	16.9mm x 11mm x 2.1mm	Shutdown: 100nA (Wake up on external events) Standby: 1.5uA (RTC running and RAM/CPU retention)	TX: -21dBm to 5dBm RX: -97dBm	U.FL	Bluetooth FCC IC CE-RED *On going	LE2640R2FA0, LE2640R2FA4, LE2640R2FA8, LE2640R2FAU0, LE2640R2FAU4, LE2640R2FAU8, LE2640R2LA0, LE2640R2LA4, LE2640R2LA8, LE2640R2LAU0, LE2640R2LAU4, LE2640R2LAU8 are pin-to-pin compatible
	BDE-LE2640R2FAU4	CC2640R2F	BLE 5.1	NO -40°C to 85°C	16.9mm x 11mm x 2.1mm	Shutdown: 100nA (Wake up on external events) Standby: 1.5uA (RTC running and RAM/CPU retention)	TX: -21dBm to 5dBm RX: -97dBm	U.FL	Bluetooth FCC IC CE-RED *On going	LE2640R2FA0, LE2640R2FA4, LE2640R2FA8, LE2640R2FAU0, LE2640R2FAU4, LE2640R2FAU8, LE2640R2LA0, LE2640R2LA4, LE2640R2LA8, LE2640R2LAU0, LE2640R2LAU4, LE2640R2LAU8 are pin-to-pin compatible
	BDE-LE2640R2FAU8	CC2640R2F	BLE 5.1	NO -40°C to 85°C	16.9mm x 11mm x 2.1mm	Shutdown: 100nA (Wake up on external events) Standby: 1.5uA (RTC running and RAM/CPU retention)	TX: -21dBm to 5dBm RX: -97dBm	U.FL	Bluetooth FCC IC CE-RED *On going	LE2640R2FA0, LE2640R2FA4, LE2640R2FA8, LE2640R2FAU0, LE2640R2FAU4, LE2640R2FAU8, LE2640R2LA0, LE2640R2LA4, LE2640R2LA8, LE2640R2LAU0, LE2640R2LAU4, LE2640R2LAU8 are pin-to-pin compatible
	BDE-LE2640R2FNO	CC2640R2F	BLE 5.1	NO -40°C to 85°C	11.6mm x 11mm x 2.1mm	Shutdown: 100nA (Wake up on external events) Standby: 1.5uA (RTC running and RAM/CPU retention)	TX: -21dBm to 5dBm RX: -97dBm	PAD	Bluetooth FCC IC CE-RED *On going	LE2640R2FN0, LE2640R2FN4, LE2640R2FN8, LE2640R2LN0, LE2640R2LN4, LE2640R2LN8 are pin-to-pin compatible
	BDE-LE2640R2FN4	CC2640R2F	BLE 5.1	NO -40°C to 85°C	11.6mm x 11mm x 2.1mm	Shutdown: 100nA (Wake up on external events) Standby: 1.5uA (RTC running and RAM/CPU retention)	TX: -21dBm to 5dBm RX: -97dBm	PAD	Bluetooth FCC IC CE-RED *On going	LE2640R2FN0, LE2640R2FN4, LE2640R2FN8, LE2640R2LN0, LE2640R2LN4, LE2640R2LN8 are pin-to-pin compatible
	BDE-LE2640R2FN8	CC2640R2F	BLE 5.1	NO -40°C to 85°C	11.6mm x 11mm x 2.1mm	Shutdown: 100nA (Wake up on external events) Standby: 1.5uA (RTC running and RAM/CPU retention)	TX: -21dBm to 5dBm RX: -97dBm	PAD	Bluetooth FCC IC CE-RED *On going	LE2640R2FN0, LE2640R2FN4, LE2640R2FN8, LE2640R2LN0, LE2640R2LN4, LE2640R2LN8 are pin-to-pin compatible
	BDE-LE2640R2LAO	CC2640R2L	BLE 5.1	NO -40°C to 85°C	11.6mm x 11mm x 2.1mm	Shutdown: 100nA (Wake up on external events) Standby: 1.5uA (RTC running and RAM/CPU retention)	TX: -21dBm to 5dBm RX: -97dBm	Chip	Bluetooth FCC IC CE-RED *On going	LE2640R2FA0, LE2640R2FA4, LE2640R2FA8, LE2640R2FAU0, LE2640R2FAU4, LE2640R2FAU8, LE2640R2LA0, LE2640R2LA4, LE2640R2LA8, LE2640R2LAU0, LE2640R2LAU4, LE2640R2LAU8 are pin-to-pin compatible

Module	Part Number	Chip	Connectivity	Industrial Grade Operation Temp.	Dimension	Current Consumption	RF Performance	Antenna	Certification	Comments
	BDE-LE2640R2LA4	CC2640R2L	BLE 5.1	NO -40°C to 85°C	11.6mm x 11mm x 2.1mm	Shutdown: 100nA (Wake up on external events) Standby: 1.5uA (RTC running and RAM/CPU retention)	TX: -21dBm to 5dBm RX: -97dBm	Chip	Bluetooth FCC IC CE-RED <i>*On going</i>	LE2640R2FA0, LE2640R2FA4, LE2640R2FA8, LE2640R2FAU0, LE2640R2FAU4, LE2640R2FAU8, LE2640R2LA0, LE2640R2LA4, LE2640R2LA8, LE2640R2LAU0, LE2640R2LAU4, LE2640R2LAU8 are pin-to-pin compatible
	BDE-LE2640R2LA8	CC2640R2L	BLE 5.1	NO -40°C to 85°C	11.6mm x 11mm x 2.1mm	Shutdown: 100nA (Wake up on external events) Standby: 1.5uA (RTC running and RAM/CPU retention)	TX: -21dBm to 5dBm RX: -97dBm	Chip	Bluetooth FCC IC CE-RED <i>*On going</i>	LE2640R2FA0, LE2640R2FA4, LE2640R2FA8, LE2640R2FAU0, LE2640R2FAU4, LE2640R2FAU8, LE2640R2LA0, LE2640R2LA4, LE2640R2LA8, LE2640R2LAU0, LE2640R2LAU4, LE2640R2LAU8 are pin-to-pin compatible
	BDE-LE2640R2LN0	CC2640R2L	BLE 5.1	NO -40°C to 85°C	11.6mm x 11mm x 2.1mm	Shutdown: 100nA (Wake up on external events) Standby: 1.5uA (RTC running and RAM/CPU retention)	TX: -21dBm to 5dBm RX: -97dBm	PAD	Bluetooth FCC IC CE-RED <i>*On going</i>	LE2640R2FN0, LE2640R2FN4, LE2640R2FN8, LE2640R2LN0, LE2640R2LN4, LE2640R2LN8 are pin-to-pin compatible
	BDE-LE2640R2LN4	CC2640R2L	BLE 5.1	NO -40°C to 85°C	11.6mm x 11mm x 2.1mm	Shutdown: 100nA (Wake up on external events) Standby: 1.5uA (RTC running and RAM/CPU retention)	TX: -21dBm to 5dBm RX: -97dBm	PAD	Bluetooth FCC IC CE-RED <i>*On going</i>	LE2640R2FN0, LE2640R2FN4, LE2640R2FN8, LE2640R2LN0, LE2640R2LN4, LE2640R2LN8 are pin-to-pin compatible
	BDE-LE2640R2LN8	CC2640R2L	BLE 5.1	NO -40°C to 85°C	11.6mm x 11mm x 2.1mm	Shutdown: 100nA (Wake up on external events) Standby: 1.5uA (RTC running and RAM/CPU retention)	TX: -21dBm to 5dBm RX: -97dBm	PAD	Bluetooth FCC IC CE-RED <i>*On going</i>	LE2640R2FN0, LE2640R2FN4, LE2640R2FN8, LE2640R2LN0, LE2640R2LN4, LE2640R2LN8 are pin-to-pin compatible
	BDE-USB205	CC2642R	BLE 5.2/ USB2.0	NO -40°C to 85°C	60mm x 24mm x 9mm	0.95uA@Standby 6.9mA@RX 7.4mA@TX@0dBm 9.7mA@TX@5dBm	TX: -21dBm to 5dBm RX: -105dBm	PCB	No Plan	USB dongle
	BDE-BLEM205-IN	CC2642R	BLE 5.2	YES -40°C to 85°C Long life, Low error rate	22.95mm x 15mm x 2.2mm	0.95uA@Standby 6.9mA@RX 7.4mA@TX@0dBm 9.7mA@TX@5dBm	TX: -21dBm to 5dBm RX: -105dBm	PCB	Bluetooth FCC IC CE-RED	BDE-RFM207-IN, BDE-RFM207, BDE-RFM207B, BDE-BLEM205-IN, BDE-BLEM205, BDE-BLEM205-Q1 are pin-to-pin compatible
	BDE-BLEM205	CC2642R	BLE 5.2	NO -40°C to 85°C	22.95mm x 15mm x 2.2mm	0.95uA@Standby 6.9mA@RX 7.4mA@TX@0dBm 9.7mA@TX@5dBm	TX: -21dBm to 5dBm RX: -105dBm	PCB	Bluetooth FCC IC CE-RED	BDE-RFM207-IN, BDE-RFM207, BDE-RFM207B, BDE-BLEM205-IN, BDE-BLEM205, BDE-BLEM205-Q1 are pin-to-pin compatible
	BDE-BLEM205-Q1	CC2642R-Q1	BLE 5.1	NO -40°C ~ 105°C	22.95mm x 15mm x 1.5mm	0.95uA@Standby 6.9mA@RX 7.4mA@TX@0dBm 9.7mA@TX@5dBm	TX: -21dBm to 5dBm RX: -105dBm	PCB	Bluetooth FCC IC CE-RED	BDE-RFM207-IN, BDE-RFM207, BDE-RFM207B, BDE-BLEM205-IN, BDE-BLEM205, BDE-BLEM205-Q1 are pin-to-pin compatible
	BDE-BLEM203D	CC2640R2F	BLE 5.1	NO -40°C to 85°C	20.5mm x 13mm x 2.1mm	1.1uA@Standby 5.9mA@RX 6.1mA@TX@0dBm 9.1mA@TX@5dBm	TX: -21dBm to 5dBm RX: -96dBm	PCB	Bluetooth FCC IC CE-RED	

Module	Part Number	Chip	Connectivity	Industrial Grade Operation Temp.	Dimension	Current Consumption	RF Performance	Antenna	Certification	Comments
	BDE-BLEM203P	CC2640R2F	BLE 5.0	NO -40°C to 85°C	16.55mm x 10.88mm x 2.3mm (With Shielding)	Shutdown: 100nA 1.1uA@Standby 5.9mA@RX 6.1mA@TX@0dBm 9.1mA@TX@5dBm	TX: -21dBm to 5dBm RX: -96dBm	PCB	Bluetooth FCC IC CE-RED *On going	BDE-BLEM201P, BDE-BLEM401P, BDE-BLEM203P, BDE-BLEM501P are pin2pin compatible
	BDE-BLEM201P	CC2541	BLE 5.0	NO -40°C to 85°C	16.55mm x 10.88mm x 2.2mm	1uA@Standby 17.9mA@RX 18.2mA@TX@0dBm	TX: -23dBm to 0dBm RX: -94dBm	PCB	Bluetooth FCC IC CE-RED SRRC	BDE-BLEM201P, BDE-BLEM401P, BDE-BLEM203P, BDE-BLEM501P are pin2pin compatible
	BDE-BLEM201	CC2541	BLE 4.0	NO -40°C to 85°C	16.55mm x 10.88mm x 1.5mm	1uA@Standby 17.9mA@RX 18.2mA@TX@0dBm	TX: -23dBm to 0dBm RX: -94dBm	Chip	No Plan	
	BDE-BLEM202	CC2540	BLE 4.0	NO -40°C to 85°C	25mm x 15mm x 2.2mm	1uA@Standby 19.6mA@RX 24mA@TX@ -6dBm	TX: -23dBm to 4dBm RX: -94dBm	PCB	No Plan	
	BDE-USB201	CC2540	BLE 5.0/ USB2.0	NO -40°C to 85°C	22.6mm x 18.5mm x 7.7mm	1uA@Standby 19.6mA@RX 24mA@TX@ -6dBm	TX: -23dBm to 4dBm RX: -94dBm	PCB	No Plan	USB dongle
	BDE-BLEM211	CC2541	BLE 5.0	NO -40°C to 85°C	11.61mm x 10.97mm x 2.2mm	11uA@Standby 17.9mA@RX 18.2mA@TX@0dBm	TX: -23dBm to 0dBm RX: Up to -94dBm	PAD	No Plan	
	BDE-BC001	CC2541	BLE 4.0	NO -40°C to 85°C	42.2mm x 28.3mm x 11mm	1s/35uA/210days 3s/13uA/564days 1s/65uA/113days 3s/20uA/367days	TX: -23dBm to 4dBm RX: -94dBm	PCB	No Plan	
	BDE-BC002	CC2640R2F	BLE 5.0	NO -40°C to 85°C	42.2mm x 28.3mm x 11mm	1s/22uA/333days 2s/12uA/611days 3s/9uA/814days 5s/5uA/1466days	TX: -23dBm to 4dBm RX: -94dBm	PCB	No Plan	
Sub-1G										
	BDE-SG1314R10N/U	CC1314R10	Sub-1G	NO -40°C to 85°C	22mm x 15mm x 2.15mm	0.8uA@Standby 5.8mA@RX 24.9mA@TX@14dBm	TX: 14dBm RX: -121dBm using Long-Range Mode, -110dBm at 50 kbps (Sub-1 GHz)	Pad or U.FL	FCC IC CE-RED *On going	Pin to pin compatible with BDE-SG1311R3N/U, BDE-SG1312R7N/U, BDE-RFM216, BDE-RFM214A
	BDE-SG1311P3N/U	CC1311P3	Sub-1G	NO -40°C to 85°C	24.9mm x 19mm x 2.15mm	0.8uA@Standby 5.8mA@RX 24.9mA@TX@14dBm 64mA@TX@20dBm	TX: 20dBm RX: -121dBm using Long-Range Mode, -110dBm at 50 kbps (Sub-1 GHz)	Pad or U.FL	FCC IC CE-RED	With PA
	BDE-SG1311R3N/U	CC1311R3	Sub-1G	NO -40°C to 85°C	22mm x 15mm x 2.15mm	0.8uA@Standby 5.8mA@RX 24.9mA@TX@14dBm	TX: 14dBm RX: -121dBm using Long-Range Mode, -110dBm at 50 kbps (Sub-1 GHz)	U.FL	FCC IC CE-RED	
	BDE-SG1312R7N/U	CC1312R7	Sub-1G	NO -40°C to 85°C	22mm x 15mm x 2.15mm	0.8uA@Standby 5.8mA@RX 24.9mA@TX@14dBm	TX: 14dBm RX: -121dBm using Long-Range Mode, -110dBm at 50 kbps (Sub-1 GHz)	U.FL	FCC IC CE-RED	

Module	Part Number	Chip	Connectivity	Industrial Grade Operation Temp.	Dimension	Current Consumption	RF Performance	Antenna	Certification	Comments
	BDE-USB216	CC1312R	Sub-1G/ USB2.0	NO -40°C to 85°C	80mm x 32mm x 12mm	0.55uA@Standby 5.8mA@RX 24.9mA@TX@14dBm	TX: 14dBm RX: -121dBm using Long-Range Mode, -110dBm at 50 kbps (Sub-1 GHz)	Helix	FCC CE-RED	USB dongle
	BDE-RFM216-IN	CC1312R	Sub-1G	YES -40°C to 85°C Long life, Low error rate	22mm x 15mm x 2.15mm	0.55uA@Standby 5.8mA@RX 24.9mA@TX@14dBm	TX: 14dBm RX: -121dBm using Long-Range Mode, -110dBm at 50 kbps (Sub-1 GHz)	U.FL or PAD	FCC IC CE-RED <i>*On going</i>	BDE-RFM216-IN, BDE-RFM216, BDE-RFM214A are pin-to-pin compatible
	BDE-RFM216	CC1312R	Sub-1G	NO -40°C to 85°C	22mm x 15mm x 2.15mm	0.55uA@Standby 5.8mA@RX 24.9mA@TX@14dBm	TX: 14dBm RX: -121dBm using Long-Range Mode, -110dBm at 50 kbps (Sub-1 GHz)	U.FL or PAD	FCC IC CE-RED	BDE-RFM216-IN, BDE-RFM216, BDE-RFM214A are pin-to-pin compatible
	BDE-RFM206	CC1312R	Sub-1G	NO -40°C to 85°C	22mm x 15mm x 2.15mm	0.55uA@Standby 5.8mA@RX 24.9mA@TX@14dBm	TX: 14dBm RX: -121dBm using Long-Range Mode, -110dBm at 50 kbps (Sub-1 GHz)	PCB	FCC IC CE-RED <i>*On going</i>	BDE-RFM206, BDE-RFM204A are pin-to-pin compatible
	BDE-RFM206-IN	CC1312R	Sub-1G	NO -40°C to 85°C	25mm x 15mm x 2.15mm	0.55uA@Standby 5.8mA@RX 24.9mA@TX@14dBm	TX: 14dBm RX: -121dBm using Long-Range Mode, -110dBm at 50 kbps (Sub-1 GHz)	PCB	FCC IC CE-RED <i>*On going</i>	BDE-RFM206, BDE-RFM204A are pin-to-pin compatible
	BDE-RFM204	CC1310	Sub-1G	NO -40°C to 85°C	20.5mm x 13mm x 2.1mm	0.7uA @ Standby 3mA @ RX 10mA @ TX @ 10dBm	TX: 15dBm RX: -124dBm using Long-Range Mode, -110dBm at 50 kbps (Sub-1 GHz)	PCB	FCC CE-RED	
	BDE-RFM214	CC1310	Sub-1G	NO -40°C to 85°C	13mm x 13mm x 2.1mm	0.7uA @ Standby 5.4mA @ RX 13.4mA @ TX @ 10dBm	TX: 15dBm RX: -124dBm using Long-Range Mode, -110dBm at 50 kbps (Sub-1 GHz)	PAD	FCC IC CE-RED <i>*On going</i>	
	BDE-RFM204A	CC1310	Sub-1G	NO -40°C to 85°C	25mm x 15mm x 2.15mm	0.7uA @ Standby 5.4mA @ RX 13.4mA @ TX @ 10dBm	TX: 15dBm RX: -124dBm using Long-Range Mode, -110dBm at 50 kbps (Sub-1 GHz)	PCB	FCC IC CE-RED <i>*On going</i>	BDE-RFM206, BDE-RFM204A are pin-to-pin compatible
	BDE-RFM214A	CC1310	Sub-1G	NO -40°C to 85°C	22mm x 15mm x 2.15mm	0.7uA @ Standby 5.4mA @ RX 13.4mA @ TX @ 10dBm	TX: 15dBm RX: -124dBm using Long-Range Mode, -110dBm at 50 kbps (Sub-1 GHz)	U.FL or PAD	FCC IC CE-RED <i>*On going</i>	BDE-RFM216-IN, BDE-RFM216, BDE-RFM214A are pin-to-pin compatible
Wireless Battery Management System (BMS)										
	BDE-BMS2662R-Q1	CC2662R-Q1	Wireless BMS	NO -40 °C to +105 °C	22.95mm x 15mm x 2.1 mm	0.94uA@Standby 6.9mA@RX 7.3mA@TX@0dBm 9.6mA@TX@5dBm	TX: -21dBm to 5 dBm RX: -92dBm	PCB	FCC IC CE-RED AEQ-100 <i>*Planned</i>	



Bluetooth® SIG Recommended Service Provider



Authorized Module Provider

BDE Technology, Inc. is an innovation driven company dedicated to green wireless IoT technologies. BDE is committed to providing ultra low power wireless communication technologies, particularly Bluetooth Low Energy (BLE), Bluetooth Dual-mode, Sub-1GHz, Zigbee, Thread, WiFi, Wi-Sun, Matter, Amazon Sidewalk and NB-IoT modules and solutions to OEMs, system integrators, device manufacturers and solution providers worldwide.

BDE is a Bluetooth SIG recommended service provider for Prequalified Components, OEM & ODM Products & Reference Designs and Software Application Development. BDE is a TI(Texas Instruments) authorized third party module provider.

Equipped with BDE's innovative products and outstanding services which include BLE protocol stacks, wireless modules, applications, system solutions and world class expertise, customers are able to shorten development cycles, reduce design uncertainty, lower production cost and release more competitive products into markets quickly and efficiently. BDE's flexible, highly integrated products and solutions are able to be customized to the most demanding requirements in numerous IoT devices and applications such as industrial automation, medical and health care, sports and fitness, smart watches, human interface devices, automotive, smart energy, smart building, home automation etc.

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