

Product Summary

BE62S

High performance, Ultra low power, Long range Bluetooth 5.0 engine

- Arm® Cortex® M4 with Bluetooth 5.0 for connectivity and performance oriented applications
- Ultra compact - 11.5 mm x 13.5 mm x 2.2 mm
- High performance
- Long Range
- Extended temperature range up to 105 °C



Overview

BE62S is a high performance, super efficient BLE 5.0 module, targeted for MESH and Automotive applications where highly reliable wireless connection, low power consumption and ease of integration are the key requirements.

BE62S modules are ideal for battery operated applications that require medium to long range connectivity. BE62S modules features a high performance integrated chip antenna and AECQ compliant sub components.

Key features

Protocol	v5.0, BLE MESH
Processor	ARM Cortex-M4 @40 MHz with FPU
RAM	160 kB
ROM	384 kB
Flash	512 kB
Crystals	40 MHz

Antenna	Ceramic Chip
Role	Broadcaster, Observer, Central and Peripheral
Form factor	11.5 mm x 13.5 mm x 2.2 mm
Footprint	Castellations 23
Firmware	Celium Connectivity / Open core
Max. Range	80 to 200 meters (Line of sight)

Applications

MESH Lighting

Vehicle telematics

Automotive

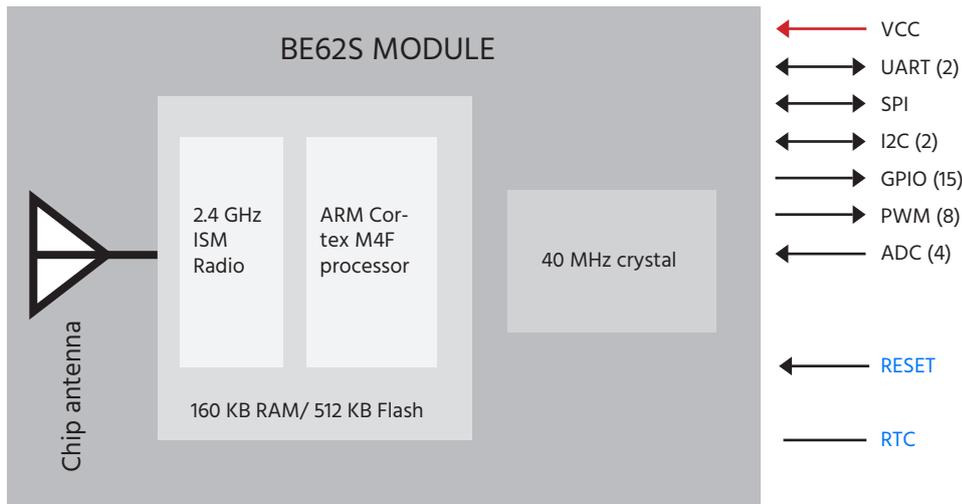
MESH Sensor networks

Industrial IoT



celium devices

Block diagram



Specifications

INTERFACES

UART (User/Log)
PWM
ADC (Channels)
GPIO
SPI (Master and slave)
I2C (Master and slave - 7 Bits and 10 Bits Adress modes support)
I2S (master/Slave)
PDM
DMA (Channels)
IR Controller
Hardware Key Scan Engine (Rows/Columns)

BE62S - X

2/1
8
6
15
2/1
2/2
2/2
1
6
•
12/20

BE62S - AT

•
-
-
-
-
-
-
-
-
-

PERIPHERALS

RTC
32 Bit timer with counter

1
6

-
-

RADIO

Bluetooth qualification
Max transmission current @ 0 dBm (mA)
Max receiver current @ 0 dBm (mA)
Receiver sensitivity (dBm)

v5.0
7.9
7.3
-97

v5.0
7.9
7.3
-97

Further information

For contact information, visit www.celiumdevices.com
 For more product details and ordering information, see the product data sheet.

