HARDWARE REFERENCE MANUAL

XBee910

A Telit cellular module on an Xbee interface board

February 1, 2019

Revision 1.1

Revision	Date	Notes
1.0	22/06/2018	Initial hardware reference manual
1.1	19/09/2018	Updated images and dimensions added

Contents

1   Introduction

The XBee910 module has been designed to allow the user ease of use with plug & play cellular modules with the Digi® XBee™ interface. Options are available for Cat-M1, Cat-1, LTE, GSM, UMTS and HSPA.

By utilising the XBee™ interface the XBee910 allows the user the option to mount the module that best suits each particular application use case, no matter where in the world it is going to be deployed.

In most cases your design needs to provide flexibility depending which region the product is to be deployed. The XBee™ form factor with xE910 module allows you to take the guesswork out of the design by providing a single connector solution for interfacing the entire range of radio types available depending on your needs.
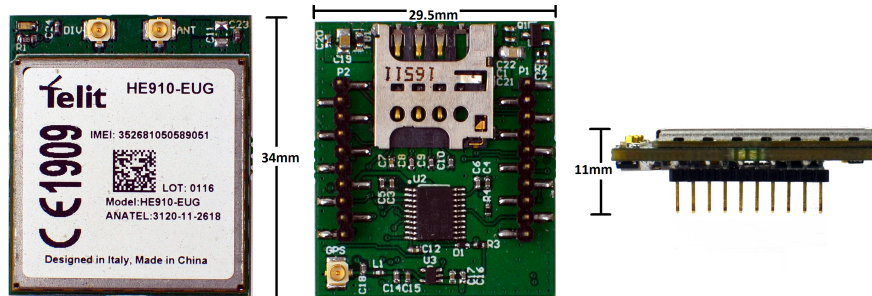
Full electrical and software (AT commands) compatibility is maintained between each module type, be it Cat-M1 (ME910C1-AU), Cat-1 (LE910C1-AP, or HSPA+ (HE910-DG).

The Glyn XBee range also includes support for Sigfox and LoRa modules.

2   Mechanical Specifications

2.1   Dimensions

34mm x 29.5mm x 11mm(including header)

2.2   Socket Types

2.2.1   10-Pin Right Angle Surface Mount Header

Manufacturer: Samtec Inc.
Part Number: TMM-110-01-T-S-SM

Pitch - Mating: 0.079"(2.00mm)
No. of Positions: 10
No. of Rows: 1
Mounting Type: Surface Mount

2.2.2   U.FL Connector

Manufacturer: Attend
Part Number: 321-33125

3 Hardware Specifications

3.1 Pinout

Pin	Function	Description
1	VCC	Supply, supported range 3.3-4.2V
2	DOUT	UART transmit
3	DIN	UART receive
4	GND	Ground
5	RESET nIN	Reset Low
6	VUSB	USB supply, supported range 4.4-5V*
7	USB+	Data +
8	USB-	Data -
9	DTR	UART data terminal ready
10	GND	Ground
11	GND	Ground
12	CTS	UART clear to send
13	ON/nSLEEP	1.8V output, drives on-board LED via MOSFET and connected to GPIO1/STAT_LED
14	VREF	Vref(Must be connected and >=1.8V)
15	GND	Ground
16	RTS	UART request to send
17	DIO3	1.8V GPIO3
18	DIO2	1.8V GPIO2
19	ADC1	1.8V ADC1
20	ON/OFF	1.8V must be driven to open drain/collector

3.2 Antenna Connectors

The XBee910 module is equipped with a 50 Ohm RF connector from Attend, P/N: 321A-33125, for Cellular, Diversity (where applicable), and GNSS (where applicable) antenna connections. These connectors are located on top side (Cellular and Diversity) and bottom side (GNSS).

Interface cables with various configurations are available from Glyn, to suit your needs: Glynstore Interface Cable Range

3.3 Hardware Commands

Please see the relevant Telit xE910 Hardware user guide for more details. The document can be found at Telit website.

3.4 Power Supply

Xbee$^{\text{TM}}$ interface supports 3.3-4.2V.
Please see the relevant Telit xE910 Hardware user guide for recommended power supply requirements for new designs. The document can be found at Telit website.

3.5 Power Consumption

Please see the relevant Telit xE910 Hardware user guide for recommended power supply requirements for new designs. The document can be found at Telit website.

3.6 Block Diagram

Block Diagram of LE910C1-AP
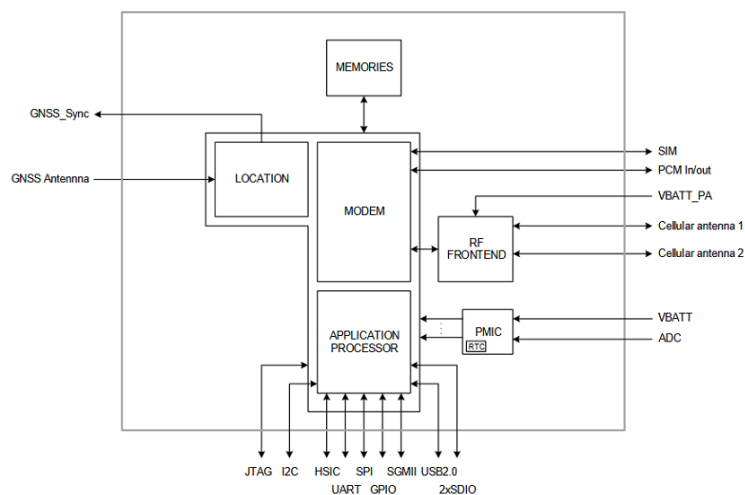
3.7 Recommended Module Summary

Part Number	Region	Technologies	Band Support	GPS
GE910-QUAD	Global(2G Only)	2.5G	850, 900, 1800, 1900 MHz	No
HE910-D	Global	3G	800/850, 900, AWS1700, 1900, 2100	No
HE910-DG	Global	3G	800/850, 900, AWS1700, 1900, 2100	Embedded
HE910-EUD	EMEA/ APAC/ Latin America	3G	800/850, 900, 2100	No
HE910-EUG	EMEA/ APAC/ Latin America	3G	800/850, 900, 2100	Embedded
LE910C1-AP	APAC/ANZ	4G(3G Fallback)	B1, B3, B5, B8, B28 (850, 900, 2100)	Embedded
ME910C1-AU	Austraila	Dual Cat1 & NB1 4G	B3, B5, B8, B28	Optional Embedded
ME910C1-WW	Worldwide	Dual Cat M1 & NB1 4G(2G fallback)	B1, B2, B3, B4, B5, B8, B12, B13, B18, B19, B20, B26, B28, B39(850, 900, 1800, 1900)	Optional Embedded