

Introduction to Differences between L70 and L70-R

GPS Module Series

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About the Document

History

Revision	Date	Author	Description
1.0	2014-03-27	King HAO	Initial
1.1	2015-12-16	Neil WU	Updated some differences between L70 and L70-R modules

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1 Introduction

L70-R GPS ROM-based module has the same electrical characteristics and footprint with L70 GPS module. But there are still some differences between them. Before replacing each other, please note the differences listed in the below chapters.

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2 Hardware Differences between L70 and L70-R Module

The following table shows the hardware differences between L70 and L70-R module.

Table 1: Hardware Differences between L70 and L70-R

Difference	Module		Note
	L70	L70-R	
The way enter into backup mode	Pin18 is called the Timer pin. It is an open drain output signal which can be used to control main power on/off of L70 module. When Timer pin is used, an external pull-up resistor is necessary. If unused, keep this pin open, or connect it to GND externally.	Timer pin is not supported. It is recommended to reserve a 0R resistor to GND at Pin18. Removing the main power (remain the backup power) is the only way to enter into backup mode in L70-R module.	For more details about the reference design of L70 and L70-R, please refer to <i>Quectel_L70_Reference_Design</i> and <i>Quectel_L70-R_Reference_Design</i> .



Figure 1: The Different Pins between L70 and L70-R Module

3 Software Differences between L70 and L70-R Module

The software differences between L70 and L70-R module have been highlighted in the table below. For more detailed information, please refer to the document *Quectel_L70_Hardware_Design* and *Quectel_L70-R_Hardware_Design*.

Table 2: Software Differences between L70 and L70-R

No.	Item	L70 Module	L70-R Module
1	Default baud rate	9600bps	9600bps
2	Default output NMEA sentences	RMC, GGA, GSV, GSA, VTG and GLL	RMC, GGA, GSV, GSA, VTG and GLL
3	Max update rate	10Hz	5Hz
4	1PPS	Supported, time pulse width 100ms	Supported, time pulse width 100ms
5	EASY	Supported	Supported
6	AIC	Supported	Supported
7	LOCUS	Supported	Not supported
8	DGPS	SBAS	Not supported
9	Periodic standby mode	Supported	Not supported
10	Periodic backup mode	Supported	Not supported
11	AlwaysLocate standby mode	Supported	Not supported
12	AlwaysLocate backup mode	Supported	Not supported
13	FLP mode	Supported	Not supported
14	PPS VS. NMEA	Supported	Supported