

Introduction to Differences between L80 and L80-R

GPS Module Series

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Our aim is to provide customers with timely and comprehensive service. For any assistance, please contact our company headquarters:

Quectel Wireless Solutions Co., Ltd.

Office 501, Building 13, No.99, Tianzhou Road, Shanghai, China, 200233

Tel: +86 21 5108 6236

Email: info@quectel.com

Or our local office. For more information, please visit:

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About the Document

History

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1 Introduction

L80-R GPS ROM-based module has the same electrical characteristics and footprint as L80 GPS module. But there are still some differences between them. Before replacing them with each other, please note the differences listed in the following chapters.

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2 Hardware Differences between L80 and L80-R

The following table shows the hardware differences between L80 and L80-R modules.

Table 1: Hardware Differences between L80 and L80-R

Difference	Module		Note
	L80	L80-R	
Whether the external active antenna is supported	<p>Pin 11, which is named as EX_ANT, is used to connect external active antenna.</p> <p>Pin 8, which is named as AADET_N, is used to indicate the status of active antenna. When active antenna is not connected to EX_ANT, AADET_N will keep a high level. AADET_N will change to a low level when active antenna is connected well. If unused, keep this pin open, or connect it to GND externally.</p>	<p>L80-R does not support external active antenna. Pin 11 and Pin 8 are reserved, and they are kept open.</p>	<p>For more details about the reference design of L80 and L80-R, please refer to Quectel L80 Reference Design and Quectel L80-R Reference Design.</p>

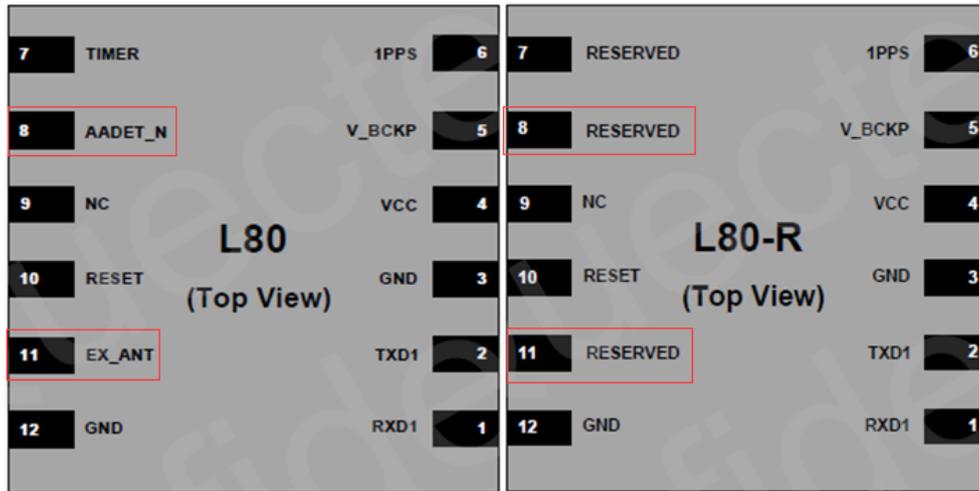


Figure 1: Different Pins between L80 and L80-R

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3 Software Differences between L80 and L80-R

The software differences between L80 and L80-R modules have been highlighted in the table below. For more detailed information, please refer to the document *Quectel_L80_Hardware_Design* and *Quectel_L80-R_Hardware_Design*.

Table 2: Software Differences between L80 and L80-R

No.	Item	Module	
		L80	L80-R
1	Default baud rate	9600bps	9600bps
2	Default output NMEA sentences	RMC, GGA, GSV, GSA, VTG, GLL and GPTXT	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