MPCI-L2 series LTE/HSPA+/GPRS Mini PCIe modules

Highlights

- Powerful LTE modules in industry-standard Mini PCIe package
- Highest throughput of up to 150Mb/s with LTE Cat. 4
- Variants for America and Europe/Asia
- Industrial temperature range –40 to +85 °C
- Manufactured in ISO/TS 16949 certified production sites



MPCI-L2 series: 30.0 x 51.0 x 3.5 mm

Product description

MPCI-L2 series modules support multi-band LTE-FDD, along with HSPA+ and GPRS/ EDGE.

With 3GPP Rel. 9 and LTE Cat 4, which provides data throughput up to 150Mb/s, the modules are ideal for both industrial and consumer applications requiring the highest data-rates.

Typical applications are industrial computing, ruggedized terminals, video communication, wireless routers, alarm panels and surveillance, digital signage and payment systems.

The temperature range of -40 to +85 guarantees operation in harsh environments, making the modules suitable for industrial applications.

The modules support HSPA+ guaranteed connectivity, even in areas that do not yet have LTE coverage.

The industry standard Mini PCIe package enables easy integration into an application board, and is also ideal for manufacturing of small series.

MPCI-L2 modules are manufactured in ISO/TS 16949 certified sites, with the highest production standards and the highest quality and reliability. Each module is fully tested and inspected during production.

MPCI-L2 modules come in variants for America and Europe/ Asia/Africa. A variant for Japan is planned.

USB drivers and RIL software for Android are free of charge.

Model	Region	Access Technology				GNSS	I	nter	face	s		Au	dio				Fe	atu	res					
		3GPP Release Baseline	LTE FDD Category	LTE Bands	UMTS Bands	GSM Bands	OMIM	GNSS receiver	UART	USB 2.0	DDC	SDIO (Master/Slave)	GPIO	Analog audio	Digital audio	Antenna Supervisor	Jamming Detection	Embedded TCP/UDP	Embedded HTTP, FTP, SSL	AssistNow software	CellLocate®	FOTA	eCall / ERA GLONASS	Dual stack IPv4 / IPv6
MPCI- L200	North America	9	4	2, 4, 5, 7, 17	850, AWS, 1900, 2100	quad- band	2x2			1						•	•	•	٠	٠	•			٠
MPCI- L210	Europe/ APAC	9	4	1, 3, 5, 7, 8, 20	850, 900, 2100	quad- band	2x2			1						•	٠	•	•	•	•			٠

Product selector



Features

LTE	Cat. 4 (150 Mb/s DL, 50 Mb/s UL) 3GPP Rel. 9 FDD Bands: MPCI-L200: 2,4,5,7,17 (America) MPCI-L210: 1,3,5,7,8,20 (EU, Asia, Africa) All channel bandwidths: 1.4 - 20 MHz MIMO 2x2 Rx diversity
UMTS/HSPA	Bands: MPCI-L200: 850/AWS/1900/2100 MHz MPCI-L210: 850,900,2100 MHz 42 Mb/s downlink, 5.76 Mb/s uplink
GSM	Bands: MPCI-L200: 850/ 900/1800/1900 MHz MPCI-L210: 850/ 900/1800/1900 MHz GPRS & EDGE Class 12
SMS	MT/MO PDU / Text mode SMS over IMS and via SMS-C

Package

52 pin PCI Express Mini Card, 30 x 51 x 3.5 mm (components on top side only) Card envelope: 5.2 mm

Environmental data, quality & reliability

Operating temperature -40 to +85°C (extended range) RoHS compliant (lead-free) Manufactured in ISO/TS 16949 certified production sites

Certifications and approvals

Software features

Protocols	Dual stack IPv4 / IPv6 Embedded TCP/IP, UDP/IP1 HTTP/FTP/SSL (Secure Socket Layer)1	MPCI-L200: MPCI-L210:	PTCRB, FCC, IC, AT&T GCF, PTCRB, FCC,RTTE&D,KCC (Korea), A-tick (Australia), operators approvals			
Network	Jamming detection					
Firmware update	Via USB					
¹ Available in FW version 0	15					
Firmware update	Jamming detection Via USB		A-tick (Australia), operators approvals			

Electrical data

Power supply3.3 \Power consumptionTBD

3.3 V +/- 9%

Support products

RIL software	
USB driver	

Available for Android 4.2 Available for Embedded Windows 6.x 7.x, Windows 7, 8

Interfaces

RF	2 Hirose UFL-R_XMT (50 $\Omega)$ Connectors (main and diversity)
Data	1 USB 2.0 (high-speed, 480 Mb/s)
(U)SIM	Supports 1.8 V and 3 V, SIM toolkit

Ordering information

MPCI-L200-xxS ¹	LTE/HSPA+/GSM modules for America Cat. 4; Bands 2, 4, 5, 7, 17
	Mini PCI Express
MPCI-L210-xxS ¹	LTE/HSPA+/GSM modules for Europe/Asia Cat. 4; Bands 1, 3, 5, 7, 8, 20 Mini PCI Express

¹ xx refers to firmware version.

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