

● ● **LN93x Series**

LTE 100/50 | DC-HSPA+ 42.0/11.5 M.2 Data Cards



## M.2 Data-cards for Mobile Computing

M.2 family data-cards deliver high-speed data rates on LTE and offer cellular connection for PC OEM device manufactures. The M.2 form factor data-card is particularly well-suited for devices with very high throughput requirements such as, PDAs, e-readers, tablets, and mobile computing or consumer electronics in general. M.2 family data cards are a natural transition from the Mini Card PCI and Half Mini Card to a smaller form factor. The M.2 family is optimized for the mobile computing world with lower power consumption, high speed USB interfaces and extended RF performance with full variety of global coverage.

The M.2 family of data cards supports multiple operating systems and has several unique Intel features such as Adaptive Clocking, Selective Suspend, Link Power Management, and Dynamic Power Thermal Management in support of an always on/always connected (AOC) user experience

### LN930

The LN930 achieves download rates to 150 Mbps through support of 3GPP release 9. There are two variant of the LN930 M.2 LTE data card to support the various RF frequency bands and band combinations deployed worldwide.

- LN930 LTE – North America, Europe, roaming in Asia Pacific
- LN930-AP LTE APAC – Asia Pacific

### LN932

The LN932 achieves download rates to 300 Mbps through support of 3GPP release 10 LTE Carrier Aggregation. There are two variant of the LN932 M.2 LTE Advanced data-card to support the various RF frequency bands and band combinations deployed worldwide.

- LN932 LTE Advanced Module – North America, Europe, roaming in Asia Pacific.
- LN932-AP M.2 APAC LTE Advanced Module – Asia Pacific

## LN933-NA

The LN933-NA achieves download rates to 150 Mbps through support of 3GPP release 10 LTE Carrier Aggregation. The LN933-NA variant is offered for North America market configurations which include high sensitivity GNSS and A-GPS functionality.

### AVAILABLE FOR

- EMEA
- North America
- Latin America
- APAC
- Korea
- Australia

**Complete, Ready to Use Access** to the Internet of Things



**Telit Modules + m2mAIR**  
Value-Added Services including Connectivity

**m2mAIR**

**ONE STOP.  
ONE SHOP. NOW, INNOVATE!**



**LN93x Series**

		LN930	LN930-AP	LN932	LN932-AP	LN933-NA
<b>Technology</b>		LTE FDD W-CDMA 2G	LTE FDD W-CDMA	LTE FDD / TDD W-CDMA / TD-SCDMA 2G	LTE FDD / TDD W-CDMA / TD-SCDMA 2G	LTE FDD W-CDMA 2G
<b>Bands</b>	Carrier Aggregation	N/A	N/A	<b>FDD DL 2CA, 40MHz</b> <b>Inter-band:</b> Band 1 plus one from bands 5/8/18/19/26 Band 2 plus one from band 4/5/13/17/29 Band 3 plus one from band 5/8/19/20/26 Band 4 plus one from band 5/13/17/29 Band 7 plus one from band 20/3 <b>Intra Band:</b> Band 4	<b>FDD DL 2CA, 40MHz</b> <b>Inter-band:</b> Band 1 plus one from bands 5/8/19/21/26 Band 3 plus one from band 7/8/5(sub 19)/20/28 Band 7 plus one from band 20/5/28 Band 21 plus one from 1/19	<b>FDD DL 2CA, 40MHz</b> <b>Inter-band:</b> Band 17 + 4 Band 17 + 2
	LTE	1-5, 7, 8, 13, 17, 18, 19, 20	1, 3, 8, 9, 11, 18, 19, 21, 26	1, 2, 3, 4, 5, 7, 8, 9, 13, 17, 18, 19, 20, 25, 26, 29 (TDD 38, 41)	1, 2, 3, 5, 7, 8, 9, 11, 18, 19, 20, 21, 25, 26, 28 (TDD 38, 39, 40, 41)	2, 3, 4, 5, 7, 17, 20
	3G	1, 2, 4, 5, 8	1, 6, 8, 9, 11	1, 2, 4, 5, 6, 8	1, 2, 5, 6, 8, 9, 11 (TDD 34, 39)	1, 2, 4, 5, 8
	2G	2, 3, 5, 8	N/A	2, 3, 5, 8	2, 3, 5, 8	2, 3, 5, 8
<b>Data throughput</b>		LTE FDD: DL: 150 Mbps, UL 50 Mbps HSPA+: DL 42 Mbps, UL 5.7 Mbps	LTE FDD: DL: 100 Mbps, UL 50 Mbps HSPA+: DL 42 Mbps, UL 5.7 Mbps	LTE FDD: DL 300 Mbps, UL 50 Mbps HSPA+: DL 42 Mbps, UL 5.7 Mbps TD-HSPA: DL 2.8 Mbps, UL 2.2 Mbps	LTE FDD: DL 300 Mbps, UL 50 Mbps HSPA+: DL 42 Mbps, UL 5.7 Mbps TD-HSPA: DL 2.8 Mbps, UL 2.2 Mbps	LTE FDD: DL: 100 Mbps, UL 50 Mbps HSPA+: DL 42 Mbps, UL 5.7 Mbps
<b>Operating temperature</b>		-10 °C to +55 °	-10 °C to +55 °	-10 °C to +55 °	-10 °C to +55 °	-10 °C to +55 °
<b>Application Interface</b>		MBIM, C-AT/NCM	MBIM, C-AT/NCM	MBIM, C-AT/NCM	MBIM, C-AT/NCM	MBIM, C-AT/NCM
<b>USB</b>		USB 2.0 HS	USB 2.0 HS	USB 3.0 and SSIC	USB 3.0 and SSIC	USB 3.0 and SSIC
<b>Antenna</b>	Diversity	•	•	•	•	•
	MIMO	•	•	•	•	•
	Connectors	Main, GNSS/Aux	Main, GNSS/Aux	Main, GNSS/Aux	Main, GNSS/Aux	Main, GNSS/Aux
	Control	4 GPO pins	4 GPO pins	4 GPO pins	4 GPO pins	4 GPO pins
<b>Tools</b>		Firmware Switching, Noise Profiling, GNSS tools, Tracing, Debugging	Firmware Switching, Noise Profiling, GNSS tools, Tracing, Debugging	Firmware Switching, Noise Profiling, GNSS tools, Tracing, Debugging	Firmware Switching, Noise Profiling, GNSS tools, Tracing, Debugging	Firmware Switching, Noise Profiling, GNSS tools, Tracing, Debugging
<b>OS support</b>		Win 7, Win 8, Win 8.1, Linux	Win 7, Win 8, Win 8.1, Linux	Win 7, Win 8, Win 8.1, Linux	Win 7, Win 8, Win 8.1, Linux	Win 7, Win 8, Win 8.1, Linux
<b>Location services</b>		GPS, A-GPS, GLONASS	GPS, A-GPS, GLONASS	GPS, A-GPS, GLONASS	GPS, A-GPS, GLONASS	GPS, A-GPS, GLONASS
<b>Certifications</b>		Certifications UL/NCC/CCC/FCC/PTCRB/CE/GCF Operator IOT target: • NA: AT&T, Verizon • EMEA: Vodafone, Telefonica, Orange	Certifications JATE/TELEC/Giteki Operator IOT target: • Japan: KDDI, NTT DoCoMo	Certifications UL/NCC/CCC/FCC/PTCRB/CE/GCF Operator IOT target: • NA: AT&T, Verizon, T-Mobile US, Sprint • EMEA: Vodafone, Telefonica, Orange	Certifications A-tick/UL/NCC/CCC/JATE/TELEC/Giteki/ Operator IOT target: • China: CMCC, China Unicom, China telecom • Japan: KDDI, Softbank, NTT DoCoMo • Australia: Telstra	Certifications FCC/PTCRB/CE/GCF Operator IOT target: • NA: AT&T
<b>Intel Platform features</b>		Ack (Adaptive Clocking), SS (Selective Suspend), LPM (USB Low Power Mode), DTPF (Dynamic TX Power and Thermal Framework), Wod (Wifi Offload)	Ack (Adaptive Clocking), SS (Selective Suspend), LPM (USB Low Power Mode), DTPF (Dynamic TX Power and Thermal Framework), Wod (Wifi Offload)	Ack (Adaptive Clocking), SS (Selective Suspend), LPM (USB Low Power Mode), DTPF (Dynamic TX Power and Thermal Framework), Wod (Wifi Offload)	Ack (Adaptive Clocking), SS (Selective Suspend), LPM (USB Low Power Mode), DTPF (Dynamic TX Power and Thermal Framework), Wod (Wifi Offload)	Ack (Adaptive Clocking), SS (Selective Suspend), LPM (USB Low Power Mode), DTPF (Dynamic TX Power and Thermal Framework), Wod (Wifi Offload)

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Telit Communications S.p.A.  
Via Stazione di Prosecco, 5/B  
I-34010 Sgonico (Trieste), Italy  
**Phone** +39 040 4192 200  
**Fax** +39 040 4192 383  
**E-Mail** [EMEA@telit.com](mailto:EMEA@telit.com)

Telit Wireless Solutions Inc.  
3131 RDU Center Drive, Suite 135  
Morrisville, NC 27560, USA  
**Phone** +1 888 846 9773 or +1 919 439 7977  
**Fax** +1 888 846 9774 or +1 919 840 0337  
**E-Mail** [NORTHAMERICA@telit.com](mailto:NORTHAMERICA@telit.com)

Telit Wireless Solutions Inc.  
Rua Paes Leme, 524, Conj. 126  
05424-101, Pinheiros  
São Paulo-SP-Brazil  
**Phone** +55 11 3031 5051  
**Fax** +55 11 3031 5051  
**E-Mail** [LATINAMERICA@telit.com](mailto:LATINAMERICA@telit.com)

Telit Wireless Solutions Co., Ltd.  
8th FL, Shinyoung Securities Bld.  
6, Gukjegeumyung-ro8-gil, Yeongdeungpo-gu  
Seoul, 150-884, Korea  
**Phone** +82 2 368 4600  
**Fax** +82 2 368 4606  
**E-Mail** [APAC@telit.com](mailto:APAC@telit.com)

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