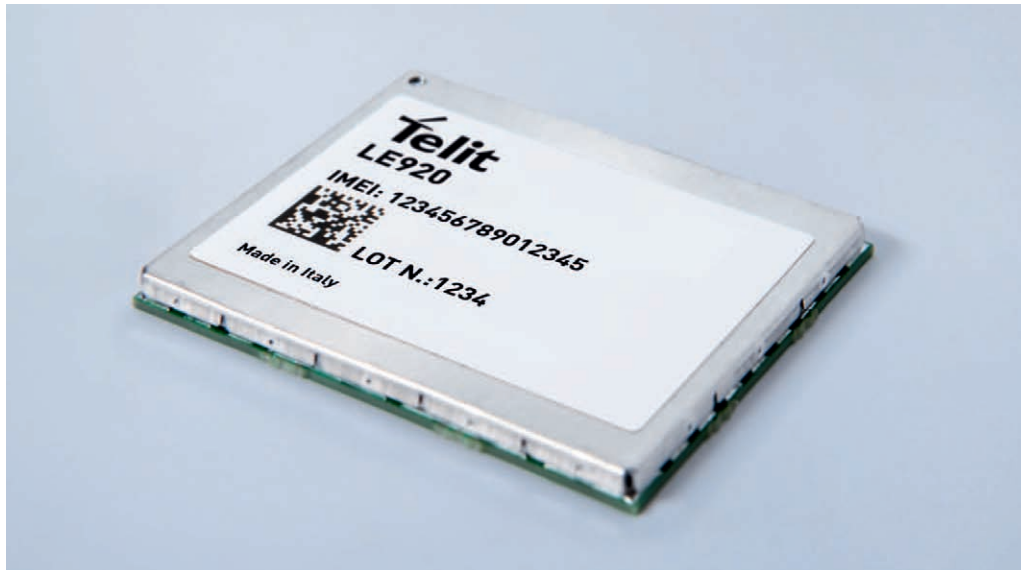


LTE 50/100 | HSPA+ 5.76/42.0

LE920 Family

Embedded



- Ultra Compact
- Telit Unified AT Command Set
- LGA Package
- Designed for Automotive Applications
- eCall
- RX Diversity
- Multi Band LTE
- Multi Band HSPA+
- Quad Band EDGE
- Quad Band GPRS
- RoHS Compliant
- SIM Access Profile
- Automotive Temperature Range
- USB 2.0 High Speed Compatible
- Extended RF Sensitivity
- Embedded TCP/IP Stack

The new Telit LE920 represents the next generation of Telit Automotive form factor xE920. The LE920 combines the two cutting edge technologies HSPA+ and LTE. As a matter of fact, LE920 is a 3.5G wireless data module offering HSPA+ connectivity with download speeds up to 42 Mbps, and a 4G M2M module at the same time, providing an ultra high-speed downlink at 100 Mbps.

Designed for use in the most demanding automotive applications and manufactured according ISO TS16949, the LE920 offers ruggedized LGA packaging with an increased robustness and cost effective mating solution. Two LE920 regional versions are available, one for European, APAC and Latin American markets and one for the North American market. Both of them come with a multi-band configuration, covering different sets of 3G and 4G bands. LE920 in pairs with its 3.5G companion HE920 offers an Automotive LGA family in a common package. Developers can take advantage of Telit's xE920 Unified Form Factor that enables a "design once, use anywhere" strategy. Design your application once and choose the technology that best fits the regional requirements for a truly seamless deployment. The LE920 is also fully backwards compatible to existing EDGE and GSM/GPRS networks through integrated quad-band radios. Additional features, such as integrated TCP/IP and UDP stack, DAC and ADC channels provide extended functionality, adding value to the final application with no additional costs. Moreover LE920 is also available with embedded GPS/GLONASS receiver and Antenna Diversity. The extensive interface set, which includes USB, SPI, I2C and user definable GPIOs, provides ease of integration of peripherals and actuators.

The LE920 is also compliant with eCall EU Directive.

The eCall project is sponsored by the European Commission and based on the EU directive E112. It is intended to adopt a black box device installed inside vehicles, wirelessly connected to Emergency Centers. In case of emergency, such as an accident, or by user intervention, the black box and its sensors will send information about the event to the abovementioned centers, with the chance to establish a voice call for safety measures.

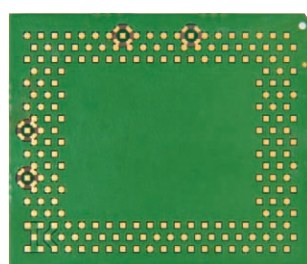
As part of Telit's commitment to protect the customer investment in developing and deploying Telit based solutions, the LE920 boasts a range of functions for over-the-air maintenance and management of firmware and application software on the module. As a part of Telit's corporate policy of environmental protection, all Telit products comply to the RoHS (Restriction of Hazardous Substances) directive of the European Union (EU Directive 2002/95/EG).

LE920 Variants							
Variant name	GSM/GPRS/EDGE quad band	HSPA+			LTE		
		Upload Mbps	Download Mbps	Frequencies MHz (Band)	Upload Mbps	Download Mbps	Frequencies MHz (Band)
EMEA / APAC / Latin American markets							
LE920-EU	■	5.76	42.0	2100 (B1)/1800 (B3)/900 (B8)	50	100	2100 (B1)/1800 (B3)/2600 (B7)/900 (B8)/800 (B20)
North American market							
LE920-NA	■	5.76	42.0	2100 (B1)/1900 (B2)/850 (B5)/800 (B6)	50	100	2100 (B1)/1900 (B2)/AWS1700 (B4)/850 (B5)/800 (B6)/700 (B17)



LE 920 Family

Embedded



actual size

Product features

- Supported frequencies
GSM/GPRS/EDGE:
850, 900, 1800, 1900 MHz
UMTS/HSPA+ :
900, 1800, 2100 MHz (EU)
800/850, 1900, 2100 (NA)
LTE:
800, 900, 1800, 2100, 2600 MHz (EU)
700, 800/850, AWS1700, 1900, 2100 MHz (NA)
- Quad Band GPRS and EDGE class 12
- Dimensions 34 x 40 x 2.8 mm
- Temperature Range
-40°C to +85°C (operational range)
-40°C to +90°C (storage)
- Embedded GPS /Glonass
- Rx Diversity
- Manufactured under TS16949
Quality specifications

Interfaces

- 198-pin LGA Interface
- 10 I/O ports maximum including multifunctional I/Os
- USB 2.0 HS
- SPI
- 2 UART
- I2C
- 1.8 V / 3 V SIM interface
- RF pad, RX Diversity pad, GPS/Glonass Antenna pad

Data

- LTE
- Uplink up to 50 Mbps
- Downlink up to 100 Mbps
- HSPA+
- Uplink up to 5.76 Mbps
- Downlink up to 42.0 Mbps
- UMTS
- Uplink/Downlink up to 384 kbps
- EDGE
- Uplink/Downlink up to 236 kbps
- GPRS
- Uplink/Downlink up to 85.6 kbps
- CSD

Electrical

- Output power
- Class 4 (2 W, 33 dBm) @ GSM 850/900
- Class 1 (1 W, 30 dBm) @ GSM 1800/1900
- Class E2 (0.5 W, 27 dBm) @ EDGE 850 / 900
- Class E2 (0.4 W, 26 dBm) @ EDGE 1800/1900
- Class 3 (0.25 W, 24 dBm) @ UMTS
- Class 3 (0.2 W, 23 dBm) @ LTE
- Supply voltage
- Nominal: 3.8 VDC
- Range: 3.4 - 4.2 VDC

Additional features

- SIM Access Profile
- 3GPP release 9 compliant
- SIM application Tool Kits 3GPP TS 51.014
- Digital voice
- Analog voice (optional embedded codec)
- IP stack with TCP and UDP protocol
- Standard and extended AT command set
- e-Call compliant

Approvals

- RoHS Compliant
- CE, GCF (Europe)
- FCC, PTCRB, IC (North America)

Order No.

Please contact your Telit representative for order codes and all further information

Copyright © 2012, Telit
Subject to changes in technology,
design and availability

Distributed by:



Telit Communications S.p.A.
Via Stazione di Prosecco, 5/B
I-34010 Sgonico (Trieste), Italy
Tel +39 040 4192 200
Fax +39 040 4192 289
E-Mail: EMEA@telit.com

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

Telit Wireless Solutions Inc.
Rua Cunha Gago, 700 - cj 81, Pinheiros
São Paulo - SP, 05421001, Brazil
Tel +55 11 3031 5051
Fax +55 11 3031 5051
E-Mail: LATINAMERICA@telit.com

Telit Wireless Solutions Co., Ltd.
12th Fl., Shinyoung Securities Bld.
34-12, Yeouido-dong, Yeongdeungpo-gu
Seoul, 150-884, Korea
Tel. +82 2 368 4600
Fax +82 2 368 4606
E-Mail: APAC@telit.com

www.telit.com

www.telit.com/ebook

www.telit.com/techforum

www.telit.com/facebook

www.telit.com/twitter

