TRASNA

Lara-L6

Compact high-speed Cat 4
module with multi-mode

A product born from

u-blox

Upgrade your IoT future with Trasna

Trasna supports over 250 leading brands across 80+ countries with end-to-end IoT connectivity hardware and software solutions for SIM, eSIM, iSIM/SoC, cellular IoT modules, and device management. We deliver the full mobile IoT value chain from chip to cloud with unmatched control, efficiency and innovation. By partnering with us, clients gain maximum value and a strong competitive edge.

Complete control

Enjoy end-to-end security. Everything starts and finishes with us, so you always have complete visibility and accountability at every stage

Complete efficiency

Our end-to-end solutions are designed to deliver optimal efficiency at every stage, reducing costs, time, and resources whilst ensuring fast, easy implementation

Complete innovation

We deliver cutting-edge, scalable technology, future-proofing your business with solutions that drive rapid growth and capitalise on emerging opportunities

u-blox cellular IoT is now Trasna

In March 2025, Trasna acquired u-blox's cellular IoT modules enabling it to strengthen its IoT connectivity chip-to-cloud offering in the OEM sector. This moved included u-blox's cellular module technology IP, product portfolio, and engineering team. This strengthened Trasna's position as a comprehensive cellular IoT solutions provider, offering end-to-end capabilities spanning semiconductor chip design, SIM and eSIM manufacturing, and cloud-based remote SIM and device management services.

Chip design   (e)SIM   Device mgmt   Cellular IoT modules

Trasna
in numbers

Top
02
in cellular
modules
Excl. China

20 bn
secure
connections
without breach

250+
clients
in 80 countries

25+
years'
in cellular IoT

Lara-L6

Lara-L6 delivers high-speed LTE Cat 4 connectivity with download speeds up to 150 Mbps in the world's smallest Cat 4 form factor. Offering multi-mode support and regional variants for voice or data, it enables flexible global deployment and simplifies migration from Lara-R6 modules. Designed for high-throughput, low-latency applications, it features built-in security and regular updates to meet evolving cybersecurity standards.

———

Same great cellular products and team, now powered by Trasna
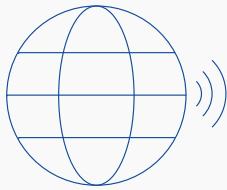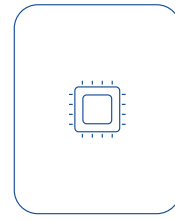
Standard

Professional

Automotive

24 × 26 × 2.6 mm

Benefits

Compact high-speed design
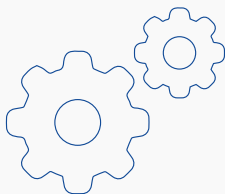The world's smallest LTE Cat 4 module with full global coverage, ideal for integration into space-limited applications

Flexible regional variants
Available in global, regional, and Japan-specific models for both voice and data or data-only deployments

Fast, reliable performance
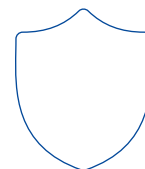Delivers up to 150 Mbps downlink and 50 Mbps uplink with multi-band support and 3G/2G fallback

Platform compatibility
Fully compatible with Lara-R6 LTE Cat 1 modules for cost-effective scaling and easier hardware reuse across applications

Secure by design
Includes secure boot, secure updates, and ongoing patch support to maintain device protection throughout its lifecycle

Highlights

Multi-mode LTE Cat 4 performance
Supports up to 150 Mbps downlink / 50 Mbps uplink with regional and global LTE band coverage, including variants with 3G/2G fallback

Comprehensive variant options
Includes voice/data and data-only models for Global (L6004/L6004D), North America (L6404/L6404D), and EMEA/APAC (L6804)

Compact form factor
Small 24 x 26 x 2.6 mm form factor delivering high-speed cellular performance in the smallest Cat 4 footprint on the market, ideal for size-sensitive hardware designs.

Voice and data flexibility
Variants support VoLTE where needed, ensuring voice-ready solutions for regions with voice service requirements

Migration-ready architecture
Hardware and interface compatibility with Lara-R6 (Cat 1) modules simplifies design reuse and cross-product development

Secure architecture
Features secure boot, encrypted updates, and regular cybersecurity maintenance per ETSI EN 645 303 standards

Versatile connectivity interfaces
Offers UART, USB, GPIO, and additional standard interfaces to ensure flexible system integration

Low-latency, high-throughput readiness
Built to support real-time applications and data streaming with minimal delay and maximum reliability

Use cases

- Industrial gateways and routers
- Alarm systems and video surveillance
- Point-of-sale terminals and kiosks
- Telematics and fleet management
- Connected health devices
- High-speed applications requiring voice and data

Product features

		Lara-L6004 Lara-L6004D*	Lara-L6804D*	Lara-L6824 Lara-L6824D*	Lara-L6404 Lara-L6404D*
Grade	Automotive				
	Professional	•	•	•	•
	Standard				
Regions		Global	Multi-region	Japan	North America
Access technology	LTE FDD bands	1, 2, 3, 4, 5, 7, 8, 12, 13, 18, 19, 20, 26, 28	1, 2, 3, 4, 5, 7, 8, 18, 19, 20, 26, 28	1, 3, 18, 19, 26	2, 4, 5, 12, 13, 14, 66, 71
	LTE TDD bands	38, 39, 40, 41	-	-	-
	UMTS/HSPA bands	850, 900, 1900, 2100	-	-	-
	GSM/GPRS bands	Q	Q	-	-
	Data rate	Cat 4	Cat 4	Cat 4	Cat 4
Positioning	GNSS via modem	•	•	•	•
Compatible Trasna services	AssistNow™	•	•	•	•
	CellLocate®	•	•	•	•
Interfaces	UART	2	2	2	2
	USB	1	1	1	1
	I2C	1	1	1	1
	I2S	1	1	1	1
	GPIO	9	9	9	9
Features	Power save mode	•	•	•	•
	TCP/IP, UDP/IP, HTTP/ FTP	•	•	•	•
	TLS / DTLS	•	•	•	•
	eDRX	•	•	•	•
	Secure boot / update	•	•	•	•
	RxDiversity	•	•	•	•
	Dual stack IPv4/IPv6	•	•	•	•
	FW update via serial (FOAT)	•	•	•	•
	FOTA/uFOTA	•	•	•	•
	LwM2M	•	•	•	•
	Last gasp	•	•	•	•
	Jamming detection	•	•	•	•
	Antenna and SIM detection	•	•	•	•
	Antenna dynamic tuning	•	•	•	•
	VoLTE/CSFB	△		△	△

Cat 4 = 150 Mbit/s DL, 50 Mbit/s U

Q = Quad-band

* = Data-only variant

△ = Not for data-only variant

Features	LTE	LTE Cat 4 (150 Mbit/s DL, 50 Mbit/s UL) 3GPP Release 10 – LARA-L6004(D) (Global) – LARA-L6804D (Multi-region) – LARA-L6824(D) (Japan) – LARA-L6404(D) (North America) Power saving features: – Rel 12 LTE power saving mode, PSM
	UMTS	HSDPA category 24, HSUPA category 6 Bands (in MHz): 850/900/1900/2100
	GSM	GPRS/EDGE multi-slot class 33 Bands (in MHz): 850/900/1800/1900
	SMS	MT/MO PDU / Text mode SMS over IMS and via SMS-C
	Voice (LARA -L6004, -L6404, -L6824 only)	VoLTE or CSFB Codec: HR/FR/EFR/AMR/AMR-WB Echo cancellation and noise reduction
Software features	Protocols	Dual stack IPv4 and IPv6 Embedded TCP/IP, UDP/IP, FTP, HTTP Embedded MQTT and MQTT-SN Embedded LwM2M eSIM and Bearer Independent Protocol
	GNSS Interfaces	Direct access to Trasna GNSS via module
	Firmware upgrade	Via UART (FOAT) and USB (FOAT and EasyFlash) FOTA / server solution (Firmware upgrade Over the Air)
Compatible u-blox services	Location	AssistNow & CellLocate
Electrical data	Power supply	3.8 V nominal, range 3.3 V to 4.5 V Extended range 3.1 V to 4.5 V
	Power consumption	Active Idle Mode: ~1.1 mA
Interfaces	Serial	2 UART 1 USB 2.0 (high-speed, 480 Mbit/s) 1 I2C 1 I2S
	GPIO	Up to 9 GPIOs, configurable
	(U)SIM	Supports 1.8 V and 3.0 V, SIM toolkit
Package	100 pin LGA (Land Grid Array)	24.0 x 26.0 x 2.6 mm, < 4 g
Environmental data, quality & reliability	Operating temperature	−40 °C to +85 °C
	RoHS compliant	Lead-free
	Trasna qualification policy	Based on AEC-Q104 standard
	Manufactured	ISO 9001 / 14001 certified production site
Certifications and approvals[1]	Lara-L6004	FCC, UKCA, ISED, RED, NCC, RCM, Giteki, Anatel
	Lara-L6004D	PTCRB, GCF, FCC, ISED, RED, UKCA, NCC, RCM, Giteki, Anatel, KC, AT&T, Verizon, T-Mobile, Telefonica, Telstra, DT, NTT, SBM, KDDI
	Lara-L6804D	GCF, RED, UKCA, NCC, RCM, Giteki, NTT, SBM, KDDI
	Lara-L6824(D)	Giteki, NTT, KDDI
	Lara-L6404(D)	PTCRB, GCF, FCC, ISED, AT&T, FirstNet, Verizon, T-Mobile
	All Lara-L6 variants	RED cybersecurity requirements ETSI EN 303 645
	1 = Contact u-blox for a list of achieved certification approvals	
Support products	EVK-L6	Evaluation kits for Lara-L6 series RIL software available for Android 14.0 and previous versions
Product variants	Lara-L6004 Lara-L6004D (data-only variant)	Global LTE Cat 4 module LTE FDD bands: 1, 2, 3, 4, 5, 7, 8, 12, 13, 18, 19, 20, 26, 28 LTE TDD bands: 38, 39, 40, 41 3G bands: 1, 2, 5, 8 2G bands: Quad-band
	Lara-L6804D	LTE module for multi-regional use, data-only LTE FDD bands: 1, 2, 3, 4, 5, 7, 8, 18, 19, 20, 26, 28 3G bands: 1, 2, 5, 8; 2G bands: Quad-band
	Lara-L6824 Lara-L6824D (data-only variant)	LTE module for Japan LTE FDD bands: 1, 3, 18, 19, 26
	Lara-L6404 Lara-L6404D (data-only variant)	LTE module for North America LTE FDD bands: 2, 4, 5, 12, 13,14, 66, 71

Take the next step

Grow your business with Trasna Lara-L6.
Contact your account manager to learn more.

hello@trasna.io | www.trasna.io

TRASNA