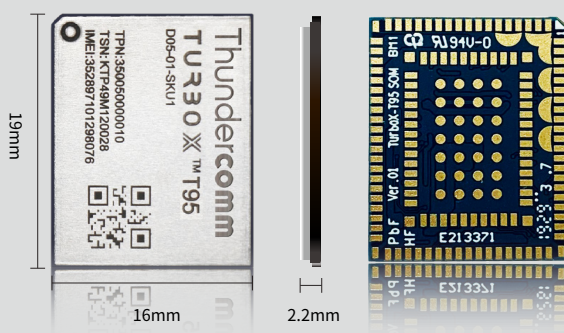


## TURBO X T95 SOM

Global LTE Cat-M1/NB2/EGPRS module rides the IoT



The TurboX T95 SOM (System On Module) is based on new generation of LTE Modem and purpose-built for the low power wide area Internet of Things (IoT) applications. It integrates all key innovations required to build cellular-enabled IoT products and services into a single module, including 3GPP Rel. 14 compliant LTE Cat M1/Cat NB2, E-GPRS connectivity, an ARM Cortex A7 application processor, integrated GNSS, hardware-based security, capable of cloud services, and rich set of development tools.

With a cost-effective LGA form factor of 19 mm×16 mm×2.2 mm and high integration level, T95 enables users to easily design their applications and take advantage from the module's low power consumption and mechanical intensity. Comparing with its last generation, the T95 SOM reduces power consumption by about 70%, BOM cost by about 50% and total chipset size by about 50%. The T95 SOM is ideal for battery-powered IoT devices to keep nearly 10 years or longer in the IoT applications.

### Applications



Portable Radio  
Transceiver



Wearables



Trackers

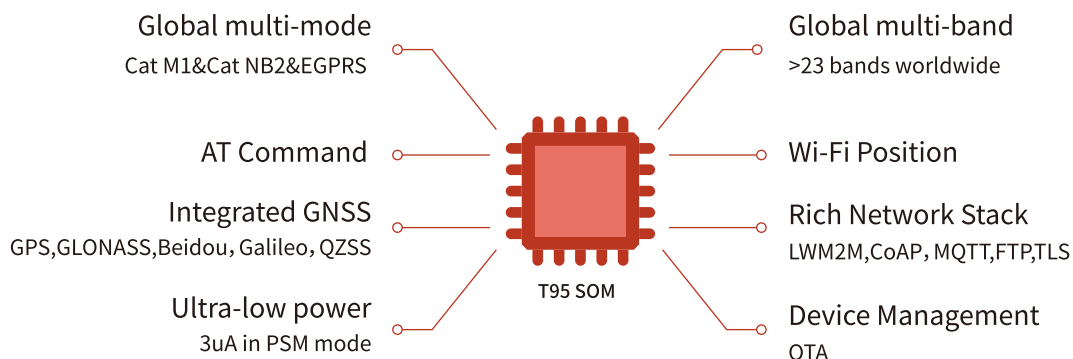


Sensors



Utility Meters

### Features



## Specifications

Specification	Category	T95G-KR	T95G-EA	T95G-NA
Chipset	CPU	Cortex-A7 up to 800 MHz with 256 KB L2 cache		
Memory	DRAM/NAND	Internally DRAM:32 MB/Internally Flash:64MB		
Air Interface	Mode	LTE Cat-M1 Power Class 3	LTE CatM1/NB2 Power Class 3 + EGPRS	LTE CatM1/NB2 Power Class 3
	RF Bands	Cat-M1:B3/B5	Cat-M1:B1/B2/B3/B4/B5/B8/B18/B19/B20/B26/B28 Cat-NB2:B1/B2/B3/B4/B5/B8/B18/B19/B20/B28 EGPRS: 850/900/1800/1900 MHz	Cat-M1: B2/B4/B5/B12/B13/B25 Cat-NB2:B2/B4/B5/B12/B13/B66/B71/B85
	GNSS	GPS/Beidou/GLONASS/QZSS		
	Peak Download Speed	588 kbps (Rel.14 Cat-M1), 127kbps (Rel.14 Cat-NB2)		
Data Rate	Peak Upload Speed	1119 kbps (Rel.14 Cat-M1), 158.5 kbps (Rel.14 Cat-NB2)		
Connectivity and Peripheral Interface	BLSP	4x BLSP supports UART, SPI, and I2C		
	GPIO/PWM	8 x GPIO , 2 x PWM		
	UIM	1 x UIM1 single voltage (1.8 V)		
	Antenna	LTE and GNSS Antenna with LGA pads		
	I2S	2x I2S		
	USB	1 x USB 2.0 device mode only		
Voice*	VoLTE/CS Voice	Not Support	VoLTE over Cat-M1	VoLTE over Cat-M1; CS Voice for GSM
Certification	Regulatory&Carrier	KC"/LGU+"/KT"/SKT"	CE"/VDF"/DT"	FCC"/IC"/GCF"/PTCRB"/AT&T"/VzW"
Dimensions	Size/Package	16 x19x 2.2mm, LGA Package		
Power	Voltage Range	3.3 V to 4.3V,Typ.3.8V		
Temperature Range	Operation	-30°C to + 75°C		
	Storage	-40°C to + 85°C		
Software	Operating System	ThreadX OS		
	SDKs	LTE IoT SDK		

\* Ongoing, " Planning

## Dev Kit

### Connectivity

- UIM
- Antenna: LTE,GNSS,Wi-Fi

### Sensor

- 6-Axis: Acc & Gyro
- Ambient & Proximity
- Temperature & Humidity
- Pressure

### Audio

- Codec: Mic, Speaker, 3.5mm Audio Jack

### Peripheral

- USB 2.0
- Expansion Connectors:SPI, Uart, i2C, PWM
- 3.7V Battery Connector

