

INTRODUCTION

The Taoglas® EDGE Multi Family is an industrial grade end to end IoT solution, which can be tailored for different customer applications. It provides a cost effective short and long range wireless IoT hardware and firmware platform for IoT. Combined with Taoglas® Edge Insights, this provides a scalable end-to-end solution for easy control, maintenance and secure management of many different connected machines, systems, instruments and appliances (Regardless of sensor or machine Interface).



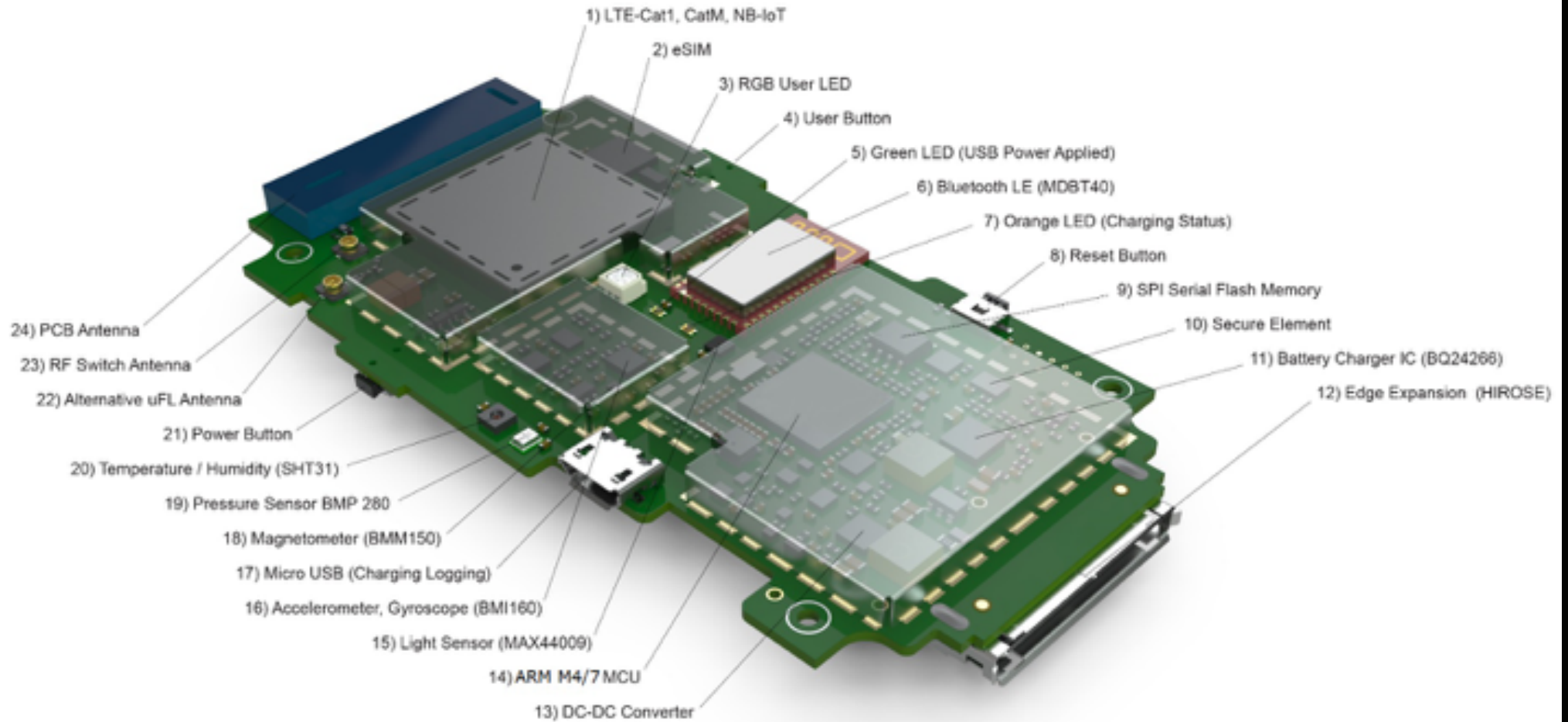
KEY FEATURES

- Completely Cloud Driven
- Secure Provisioning and Certificate Management
- Cloud Device & Sensor Management
- Over The Air (OTA) Firmware Updates and Device Diagnostics
- Deployment Lifecycle Control
- SIM Price Plan and Data Usage Management
- Easy 3rd Party Machine Interfacing and Integration
- Easy 3rd Party Sensor/Actuator Expansion interface

TYPICAL APPLICATIONS

- Industrial Appliances
- Pharma/Test Instruments
- Energy/Water Metering
- Environmental/Air Quality Monitoring
- Smart Farming (Utilities, Animal Health)
- Smart Cities / Smart Grid
- Asset Tracking
- Condition Monitoring
- Predictive Maintenance

System	Processor	ARM Cortex M7 (300MHz)
	RAM	384 KB
	Flash	2048 KB
	Firmware/OS	FreeRTOS + Applications Libraries
	Security	- Mutual authentication - Hardware root of trust - Secure key storage
Radios	Cellular Modems	- 2G, 3G, 4G, NB-IOT, CAT-M
	Cellular Antenna	- Integrated Ceramic Antenna - External FPC Antenna - External IP67 Antenna
	GNSS	GPS/GLONASS/GALILEO/BEIDOU (use external antenna)
	Bluetooth	BLE 4.2
Sensors	Temperature Sensor	Range: -40 to 125 °C Accuracy: ±0.3 °C (Standard), ±0.2 °C(High-End Version)
	Humidity Sensor	Range: 0 to 100 %RH Accuracy: ± 3% RH (Standard), ± 1.5% RH (High-End Version)
	Light Sensor	Range: 0.045-188,000 Lux
	Atmospheric Pressure Sensor	Range: 300 ... 1100 hPa Accuracy: typ. ±1 hPa
	Accelerometer	Range: up to ± 16g Accuracy: up to 16384 LSB/g with 16 bit resolution
	Gyroscope	Range: up to 2000°/s Accuracy: up to 262.4 LSB/°/s with 16 bit resolution
	Magnetometer	Range: ±1300µT (x, y-axis), ±2500µT (z-axis) Accuracy: ~0.3µT
	Battery Level	State of Charge (%)
Interfaces	External Connector	GPIO, PWM, ADC, I2C, SPI, UART, RS485, JTAG
	USB	USB 2.0 micro connector
Physical	PCB Dimensions	98.5 x 48.85 mm
	Enclosure	-Multi-Purpose Enclosure with optional wall brackets -DIN Rail Enclosure
	Operating Temperature	-20°C to +80°C



































Board Size: 50mm (w) x 94mm (h)

TAOGLAS® EDGE INSIGHTS

Filter by Active Edge

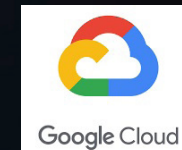
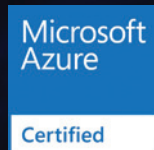
Enter Serial to search

[Add New Device](#) [Add bulk device](#) [Edit bulk device](#)

<input type="checkbox"/>	No.	Serial	Active	Last Connection	Device Type	Actions	Diagnostics	Data
<input type="checkbox"/>	1	355464072468175	● Yes	4G  March 14, 2018, 5:19 p.m.	edge	 	   	
<input type="checkbox"/>	2	355464070914063	● Yes	4G  March 15, 2018, 7:02 p.m.	edge	 	   	
<input type="checkbox"/>	3	355464070913602	● Yes	2G  March 15, 2018, 3:14 p.m.	edge	 	   	
<input type="checkbox"/>	4	355464072468100	● Yes	2G  March 14, 2018, 3:55 p.m.	edge	 	   	

COMPLETELY CLOUD MANAGED.

- Add/remove custom sensors/actuators
- Create new custom sensor types and data streams
- Switch sensors on or off
- Change sensor sample frequency
- Configure sensor units
- Control actuators



EDGE MULTI INDUSTRIAL CELLULAR GATEWAYS

		Flexi	RS485	BLUETOOTH	SENSING	COMPLETE
ORDERING #SKU		E4R01FL-MU	E4R01RS-MU	E4R01BL-MU	E4R01SE-MU	E4R01CO-MU
CELLULAR (Long Range)		.	.	.	.	.
BLE 4.1 (Short Range)				.		.
BATTERY (1200mAH)					.	.
SENSORS*					.	.
RS485			.			.
SECURITY		.	.	.	.	.
EXPANSION INTERFACE		SPI I2C UART GPIO PWM	RS485 GPIO PWM	NONE	NONE	SPI I2C UART GPIO PWM
CELLULAR UPGRADE	REGION	SUPPORTED BANDS				
2G	Global	EDGE/GSM/GPRS: 850,900,1800,1900				
2G + GNSS**	Global	EDGE/GSM/GPRS: 850,900,1800,1900				
3G + 2G	Global	HSPA: B1, B2, B5, B6, B8, B19 (+2G Fallback)				
3G + 2G + GNSS**	Global	HSPA: B1, B2, B5, B6, B8, B19 (+2G Fallback)				
LTE CatM + NB-IoT	Global	LTE: B1-5, B8, B9, B10, B12-14, B17, B18, B19, B20, B25, B26, B27, B28, B65, B66				
LTE CatM + NB-IoT + 2G + GNSS**	Global	LTE: B1-5, B8, B9, B10, B12-14, B17, B18, B19, B20, B25, B26, B27, B28, B65, B66				
LTE CAT1	EMEA or US	EMEA (LTE: B3, B8, B20) US (LTE: B2, B4, B12) (+2G Fallback)				
LTE CAT1 + 2G	EMEA	EMEA (LTE: B3, B8, B20) US (LTE: B2, B4, B12) (+2G Fallback)				

* Includes: Temperature, Humidity, Light, Accelerometer, Gyroscope, Magnetometer, Atmospheric Pressure

** GNSS Antenna Included