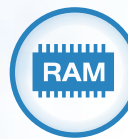QNAP × iEi

QBoat Sunny Ferries your IoT Devices to the Cloud

QBoat Sunny

IoT mini Server

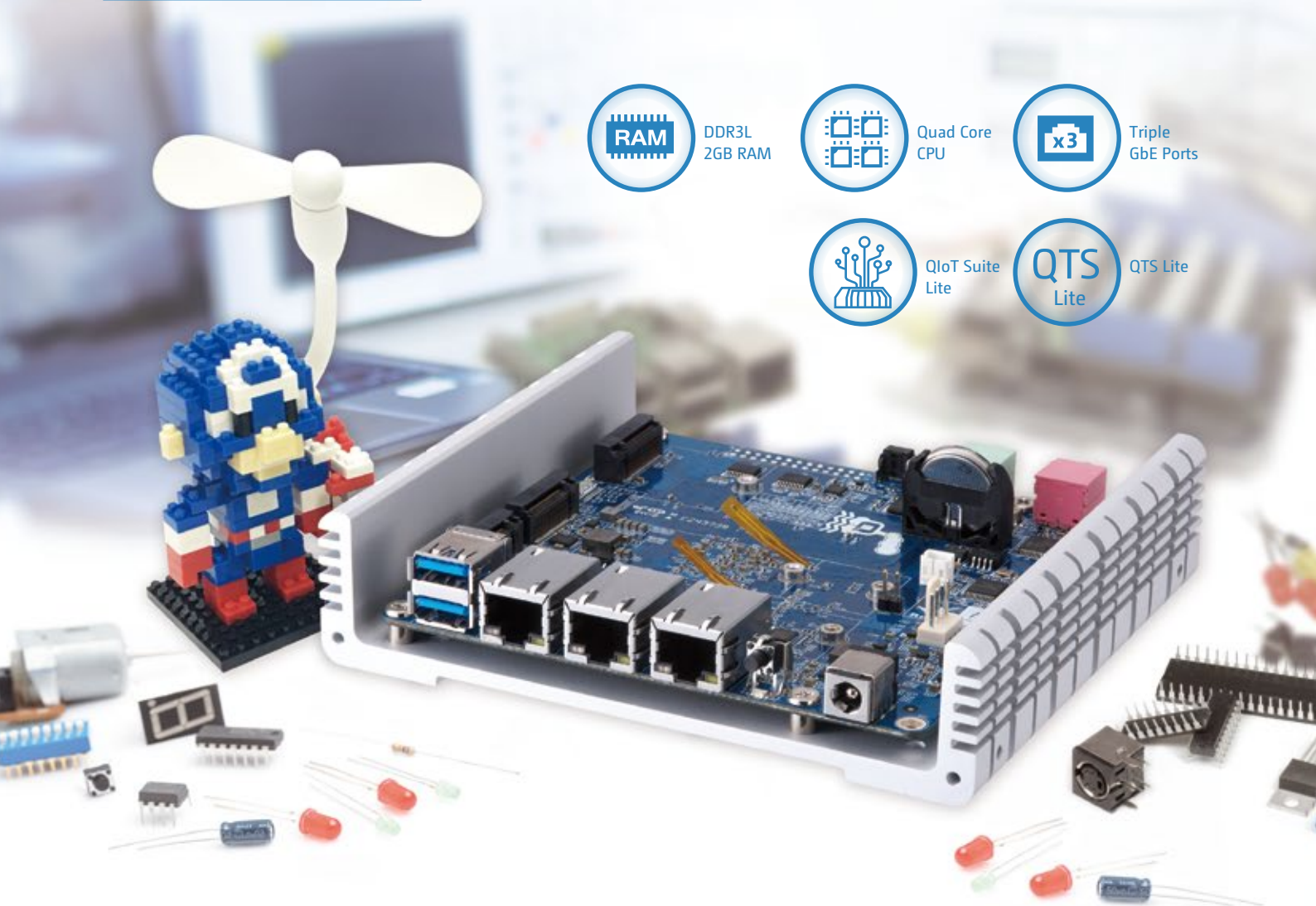**RAM** DDR3L 2GB RAM

Quad Core CPU

x3 Triple GbE Ports

QIoT Suite Lite

QTS Lite — QTS Lite

Powerful and compact system

The 12x12cm system features an AL-314 processor with 2GB RAM, allowing QBoat Sunny to run various applications in parallel for simultaneous IoT applications.

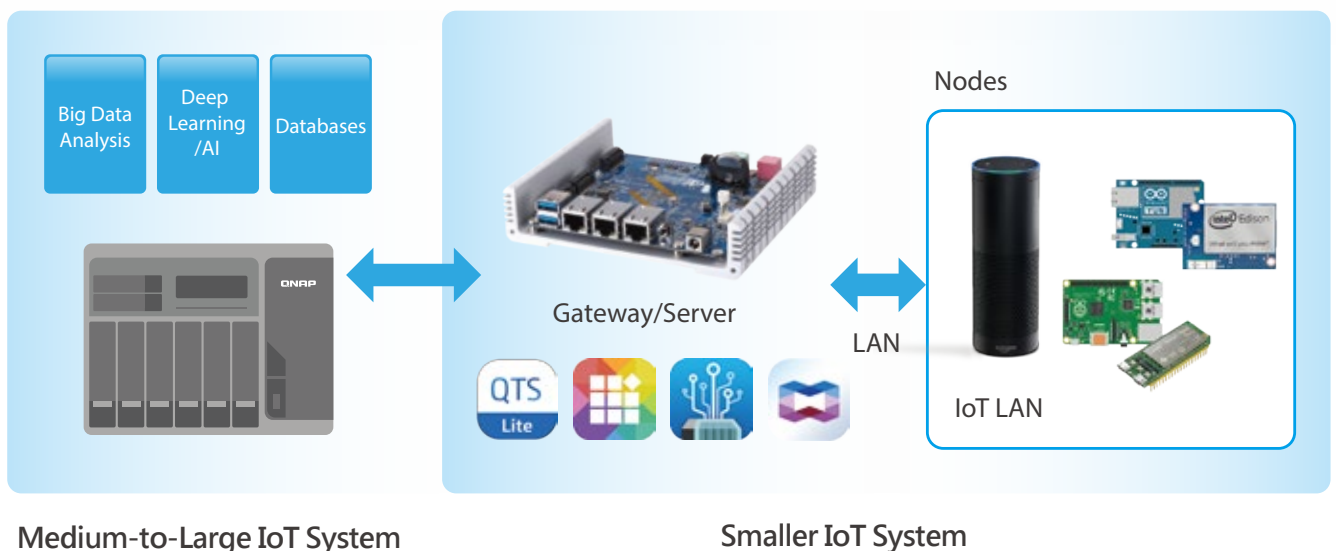## Streamlined QTS Lite operating system

QTS Lite provides a solid foundation for data security, remote connectivity, and can manage virtual and physical network connections.

Easy to create and maintain a private IoT Gateway

QIoT Suite Lite provides out-of-the-box functionality to accelerate IoT development and deployment. Existing IoT services can also be migrated to QBoat Sunny with container virtualization.

Why QBoat Sunny?

QBoat Sunny is a dedicated single-board Internet of Things (IoT) mini server featuring Container Station and QIoT Suite Lite. QBoat Sunny allows you to seamlessly manage and monitor IoT applications, devices, and data for a streamlined and efficient development experience. The scalability of QBoat Sunny can be harnessed by beginners and professionals alike to dive into the world of IoT, or for users looking for a small and portable server/gateway for their existing projects.

Medium-to-Large IoT System

Smaller IoT System

IoT-optimized QTS Lite operating system

QTS Lite is a streamlined version of QNAP's award-winning QTS operating system. QTS Lite provides Container Station to run containerized applications, myQNAPcloud for remote connectivity, Hybrid Backup Sync for backup and synchronization, and Network & Virtual Switch for managing network connections and linking containers. QTS Lite also features an App Center for adding more features and functionality.

myQNAPcloud

myQNAPcloud streamlines remote access by removing the need to deal with complex network and firewall configurations. Users can remotely access QBoat Sunny via myQNAPcloud and check real-time information of connected IoT devices.

App Center

The App Center within QBoat Sunny provides users with the ability to quickly add more features and functionality. Multiple apps from QNAP and third-party developers are available for instant download and usage.
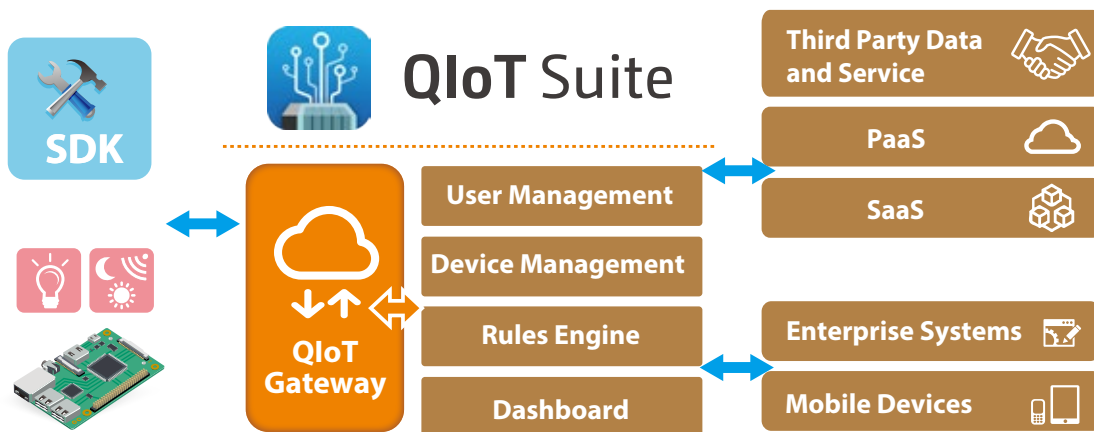
Applications for QBoat Sunny

QIoT Suite Lite

With QIoT Suite Lite, QBoat Sunny can act as Fog nodes or Edge devices that collect all telemetry data from local devices/sensors and transmit selective data back to the main QIoT server to bridge the gap. QIoT Suite Lite provides the following features:
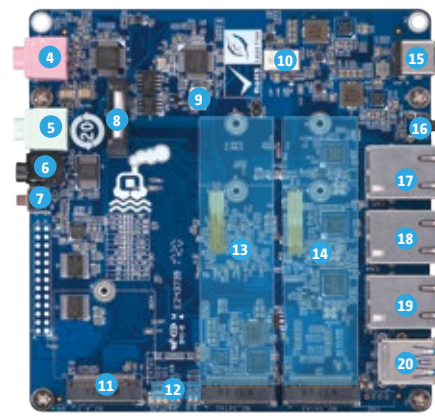
- Supports MQTT, MQTTs, CoAP, HTTP, and HTTPs
- Easily set up rules with Node-RED
- IoT Visualization
- Supports multiple development boards
- Easy integration with multiple APIs
- Secure connection with X.509 certification.

QIoT Suite

SDK				
	QIoT Gateway	User Management		Third Party Data and Service
		Device Management		PaaS
		Rules Engine		SaaS
		Dashboard		Enterprise Systems
				Mobile Devices

Container Station

While QIoT Suite provides a simple method for IoT beginners to deploy and manage different devices, Container Station allows advanced makers to migrate existing environments as a Docker image into QBoat Sunny. Multiple Docker images can be activated on QBoat Sunny in parallel, and developers can assign different physical network interfaces between them.

ponte   mongoDB.   Dashing

RabbitMQ   redis   freeboard

kafka   Node-RED   MariaDB   QBridge

Blockly blockly A visual programming editor

1 Annapurna Labs AL-314 CPU
2 512MB NAND flash
3 2GB DDR3L memory
4 3.5 mm microphone jack
5 3.5 mm headphone jack
6 Maintenance port
7 Reset button
8 RTC battery

9 RTC power
10 Fan connector
11 M.2 expansion slot
12 LED indicators
13 M.2 SSD slot 1
14 M.2 SSD slot 2
15 12V power port
16 Power button

17 Gigabit Ethernet port 1
18 Gigabit Ethernet port 2
19 Gigabit Ethernet port 3
20 USB 3.1 Gen1 Type A ports

Hardware Specifications

Model	QBoat Sunny
CPU	Annapurna Labs AL-314, 4-core,1.7GHz
System Memory	2 GB DDR3L (On-board)
Flash Memory	512MB NAND
M.2 Slots	2 x M key 2260/2280 (m.2 SATA SSD) 1 x A key 2230 (Wireless module)
SATA	SATA 6Gb/s M.2 SSD
USB Ports	2 x USB 3.1 Gen1 Type A
Ethernet Ports	3 x 1GbE RJ45
Audio In/Out	1 x 3.5mm Audio-in, 1 x 3.5mm Audio-out
Maintenance Port	1 x 3.5mm
LED Indicators	Status, SSD, Wireless, User Define

Model	QBoat Sunny
Buttons	Power, Reset
Type	System Development Board with Heatsink Base
Dimensions	5.67 x 4.96 x 1.32 inch 144 x 126 x 33.5 mm (Heat Sink Included)
Weight	Net: 1.08 lbs (0.49 kg) Gross: 2.31 lbs (1.05 kg)
Power Consumption (W)	SSD Idle: 9.49 W In operation: 13.31 W
Working Temperature	0-35°C
Humidity	5 to 95%, non-condensing, wet bulb temperature: 27°C
Power Supply	External, 36W,12V
Fan	1 x 4-pin connector

Accessories

QBoat Sunny, Ethernet Cable, Quick Installation Guide, AC Adapter, Power Cord, Wall Mount Kit, M.2 Screw Kit, 2x M.2 SSD Heat Sink