

# AQUILA 6UL IoT SOM

## Android Things™ System-On-Module



The AQUILA 6UL is a Wireless IoT SOM (System-On-Module) based on NXP i.MX6 UL high performance application processor and Cypress 2.4 GHz Wi-Fi b/g/n and Bluetooth® combo solution. It is designed to support Google Android Things™ software platform or Linux based solution. It integrates application processor, Wi-Fi/Bluetooth IC, PMIC, RF front end, clock and on-board antenna. The module dimensions are 40mm x 40mm x 5.5mm.

Together with Google Android Things, the SOM greatly simplifies the design effort for IoT devices, helps to reduce the time-to-market, and yet provides high performance and rich interfaces for variety of IoT applications such as sensor network, audio, video, device control, etc. It is an ideal solution for smart device, medical and healthcare, and M2M applications.

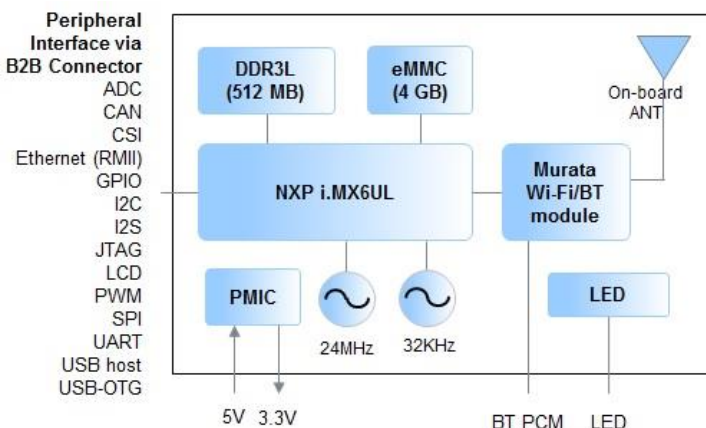
### IoT SOM Module Features

- Compatible with Google Android Things™
- Processor: i.MX6 UltraLite (ARM Cortex A7)
- 512 MB RAM and 4GB Flash
- Robust 2.4 GHz Wi-Fi 802.11 b/g/n and Bluetooth® v4.1
- On-board Antenna
- Over-The-Air firmware upgrade
- Cloud connection
- I/O Interface: ADC, CAN, CSI, Ethernet, GPIO, I2C, I2S, JTAG, LCD, PWM, SPI, UART, USB (host and OTG)
- Camera/Video Input
- LCD display output
- Board-to-Board connectors
- Certification: FCC/IC (plan)

### IoT SOM Module Application

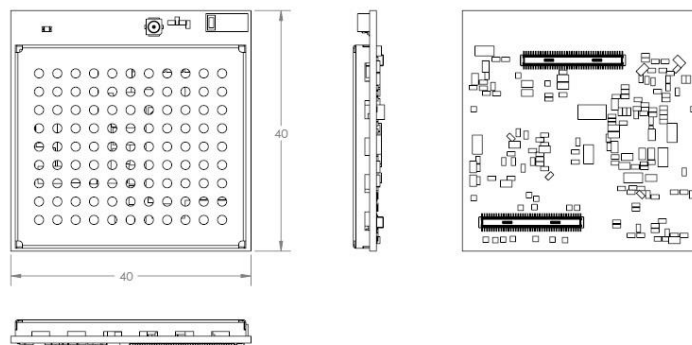
- Smart Devices: Routers, Speakers, Video Cameras, Hubs, etc.
- Sensor Devices
- Medical/Healthcare/Industrial measurement, reporting and control
- HVAC, Safety, Security

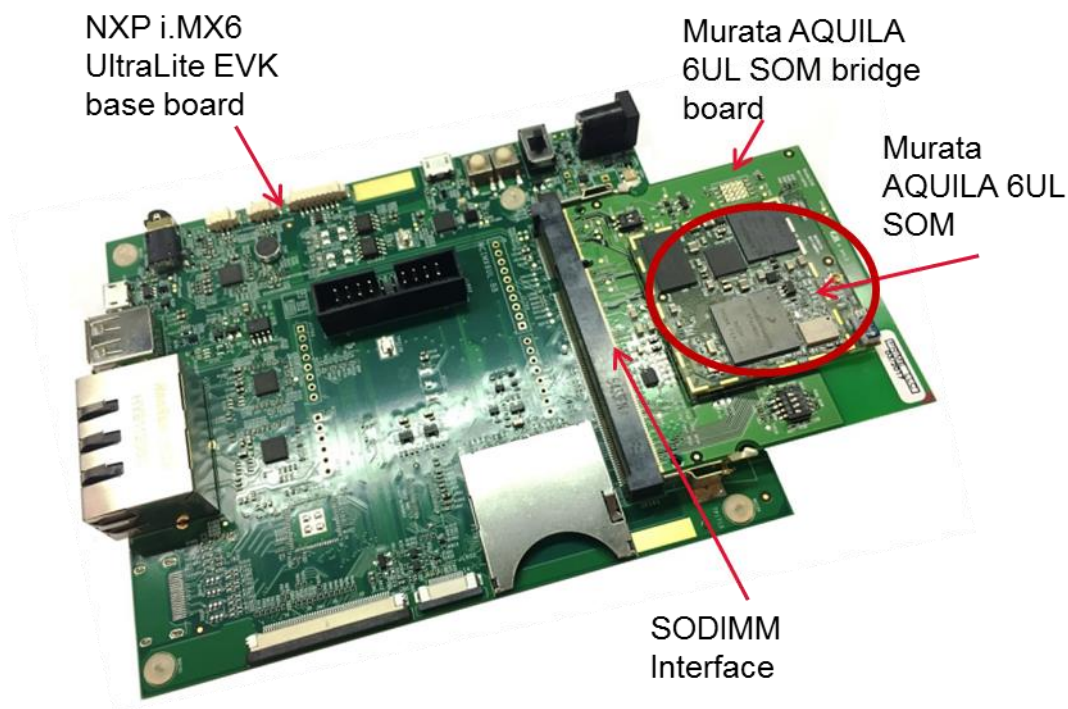
### Module Block Diagram



### Module Specification

<b>Application</b>	i.MX6 UltraLite (ARM Cortex A7)
<b>Processor</b>	
<b>RAM</b>	512 MB
<b>Flash</b>	4GB
<b>Connectivity</b>	Wi-Fi 11b/g/n; Bluetooth v4.1
<b>Peripheral I/F</b>	ADC, CAN, CSI, Ethernet, GPIO, I2C, I2S, JTAG, LCD, PWM, SPI, UART, USB (host and OTG)
<b>Connection I/F</b>	two 80-pin board-to-board connectors
<b>Voltage Input</b>	5V
<b>Antenna</b>	On-board 2.4GHz antenna
<b>Dimension</b>	40 mm x 40mm x 5.5mm
<b>Operating Temp</b>	0° to 70° C





### Murata IoT SOM EVK

#### Development Board Features

- Include Murata IoT SOM module, bridge board and NXP MCIMX6UL-BBPF base board
- LCD connector
- USB OTG connector
- USB Host connector
- Audio stereo headphone jack
- On-board microphone
- Ethernet connector
- On-board sensors: Digital Magnetometer; Accelerator; Gyroscope

#### Ordering Information

Module	Part Number
Murata IoT SOM Development Kit	WSC-WB242-ADA-SM1DK