**Product Description**

Gateway SOM based on Arm® Cortex®-A7 dual core and another Cortex®-M4 core, where the former one is for high-performance processing and the latter one is for real-time application performance. It also provides 512MB DDR3L-1600 DRAM and 8GB eMMC NAND Flash. With Secure Element (SE), SDT-A7X2-M4 ensures high security. The modules supports Arm Mbed Linux OS and Samsung Tizen, and can be directly connected to Arm Pelion and Samsung SmartThings.

**Specifications**

**CPU - i.MX7D**  
- High-performance Arm® Cortex®-A7 dual core  
- Real-time processing Arm® Cortex®-M4 sub core

**Memory**  
- 512MB DDR3L (1600Mbps)  
- 8GB eMMC (5.0) flash memory

**Low Power Consumption PMIC - PF3000**  
- 1V35, 1V5, 1V8, 3V3 output  
- Coin cell charger  
- OTP memory

**Secure Element (SE)**  
- For Key & Certification  
- Includes every Secure Information

**OS Support**  
- Arm Mbed Linux OS  
- Samsung Tizen

**Serial Peripherals**  
- UART, SPI, I2C, PWM, ADC, GPIO  
- Dual CAN  
- RGMII for 1Gbps Ethernet  
- USB Host, USB OTG  
- PCIe, SD I/O  
- MIPI CSI for camera  
- MIPI DSI for display

**Environmental**  
- 45 x 42 x 4.5mm (W x L x H) dimensions  
- 0~85°C operating temperature