The AS-SOM-iMX6 integrated solutions family is designed for embedded systems product developers and OEMs.

Asine’s AS-SOM-iMX6 ARM Cortex A9 based, utilize the rich experience and know-how in the design and implementation of embedded systems and modules, benefiting from the high level system engineering and development capabilities in cooperation with end user’s R&D.

AS-SOM-iMX6 gives engineers a unique set of off-the-shelf design features and benefits enabling: shorter time to market, lower design cost, and reduction in a projects’ risk.

The ASSOM-iMX6 is a top grade solution offered at commercial, industrial, and automotive grades.

ASSOM-iMX6 is a state of the art system technology for high availability embedded solutions, supporting the complete set of interfaces, as well as powerful processor.

Applications

- Industrial & Commercial PC/Tablet Systems
- ATM, Gaming, Lottery
- Automotive, Navigation, Infotainment, ECU
- Automotive Data Protection(CANbus)
- Point Of Sale- POS / Kiosk, Smart Terminals
- Medical
- Industrial & Airborne Systems
- Rugged Computer
- High-Speed Data Recording
- Security, HLS-Home Land Security
- Video Surveillance, JPEG2000 Capture
- Factory Automation
- JBOD, NAS, SAN, RAID
- Telecom Interconnect Appliance / Firewall
The AS-SOM-iMX6 is based on Freescale® i.MX6 family processors ARM Cortex A9 based and supports wide connectivity options like Bluetooth, Wi-Fi, CAN bus, USB, Ethernet, and more. The AS-SOM-iMX6 shows very low power consumption at single board solution for all functions & small physical size (47 X 30 mm) also supporting Automotive grade applications. The AS-SOM-iMX6 is supported by Android and Linux OS, providing all BIOS, OS drivers, APIs for customer’s applications development. The AS-SOM-iMX6 is implemented in demandable industrial applications, proving the "best of the breed".

### Features

- **Standard I/Fs included at all configurations**
- SOC i.MX6: Solo, Dual Lite, Dual, Quad core
- SOC speed 1GHz (Optional 1.2 GHz)
- 512MB-2GB DDR3 SDRAM
- *3X SD/MMC
- External storage I/F: NOR-Flash, eMMC, mSATA/SATA2 (Dual & Quad), SD/microSD, PCIe SSD
- *Power controller sequencer
- 1000 Gbit/s on Dual & Quad
- Second ETH via PCIe / USB
- *USB: 1X Host & 1X OTG
- *OS – Android 4.4.2 or Linux (No Android on Solo)
- Power: Operation 5V, All the I/O is 3.3V signaling
- Power: ~1.5 W idle and up to 10 W max (subject to utilized application)
- Processor optional heat spreader to be considered (consult us)
- Operating temperature – Commercial 0°C to +70°C, Industrial -40°C to +85°C, and Optional: -45°C to +95°C
- Storage temperature: -55°C to +100°C
- *Matching connector: Hirose DF40 connectors 1.5mm to 4.0mm mating height
- *Humidity 5% to 95% relative, non-condensing
- *Altitude (operating & non-operating) 0 to 8000 feet
- *Reliability - MTBF - 1,000,000 hours MIL-HDBK271F
- Heat dissipation balancing for demanding applications
- *Sustained environmental: Shock - Half Sine, 40G peak, 11ms; Half Sine, 1500G (3 axes), Vibration - 16.3G RMS (Random, 20Hz to 2000 Hz, 3 vibrations axes)

### Ordering Information:

P/N Structure: ASSOM6[cpu]-[Flash][m][DDR][t][r][f][i][s][custom-suffix]

### Dimensions:

47mm x 30mm

### Weight:

60 gr. (config dependent)

### Optional (OEM):

- Touch screen controller by serial IO
- Audio stereo w/ Microphone input
- LCD interface – 21 bit DSS
- Bluetooth, 802.11 Wi-Fi a/ac/b/g/n
- MicroSD socket (boot supporting)
- Conduction Cooling

### Customer Options

- Add suffixes for OEM customization

### Additional Options:

- Offset / Buy-back
- OEM Customization

### Ordering Examples:

- *Standard I/Fs included
  - ASSOM6S-0092E0 Single Core 1GHz, no Flash, 512GB DDR, operating -40°C to +85°C, 10/100M/s ETH
  - ASSOM6D-0012E0 Dual 1GHz, 1GB no Flash, 1GB DDR, operating -40°C to +85°C, 10/100M/s ETH

The information contained in this document is subject to change without notice.