

- High-performance ARM quad-core single board computer
- Low power consumption
- Dual channel LVDS to drive 1080p LCD
- Rich interfaces, supports I²C, GPIO
- 9V~36V wide range power input
- Over voltage protection (optional)
- Quad-band WCDMA (3G) module (optional)



SBC2100 Features

- **Powerful, quad-core performance.** Designed with all the major features of the Freescale i.MX6 multi-core platform, the SBC2100's onboard quad-/dual-core processor running at 1 GHz provides the ideal platform for developing devices based on a single hardware design.
- **Rich peripheral interfaces.** Numerous interfaces along with accompanying device drivers on the SBC2100 offer abundant and quick software and hardware development capabilities
- **I²C master mode communication.** The onboard I²C bus (master mode) allows application software to access low-speed peripherals such as hardware diagnostic sensors, or low-speed ADC/DAC.
- **Multiple OS support.** The SBC2100 supports Android 4.2, Ubuntu 11.10, giving you flexible choices for product development.
- **Ultra wide input-voltage range.** The SBC2100 operates over an ultra-wide input range of 9V~36V.
- **Over voltage/current protection.** This feature is designed to protect SBC2100 from a higher voltage/current input. This is a useful feature in a variety of applications such as industrial equipment or vehicle.

SBC2100 Overview

The SBC2100 is a smart, cost-effective single board computer for a wide range of commercial and industrial applications. Integrated with essential system interfaces with ample options for expanding hardware capabilities, the SBC2100 enables fast and easy development of applications, ensuring prompt time-to-market turnaround.

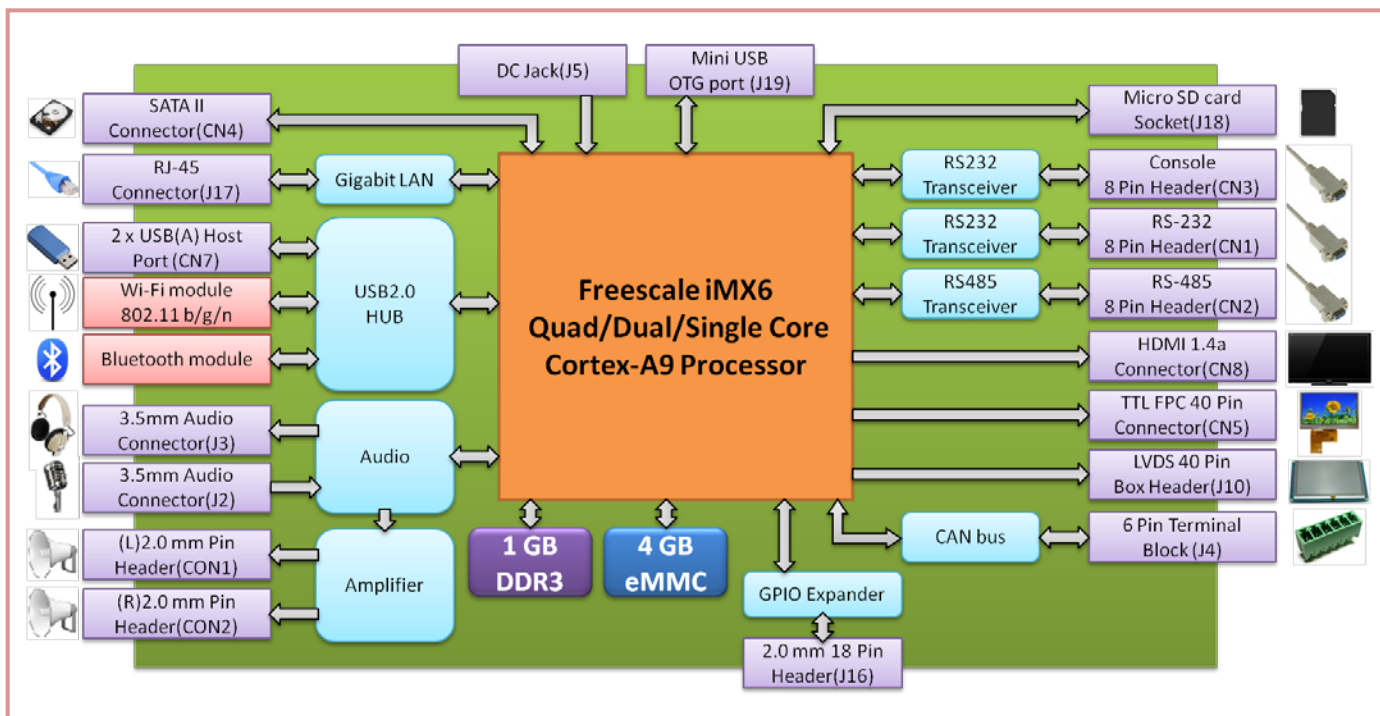
SBC2100 Typical Applications

- ❑ Digital signage
- ❑ POS, KIOSKs
- ❑ Gaming devices
- ❑ Machine control
- ❑ Data logger
- ❑ Vehicle Infotainment
- ❑ Industrial Equipment

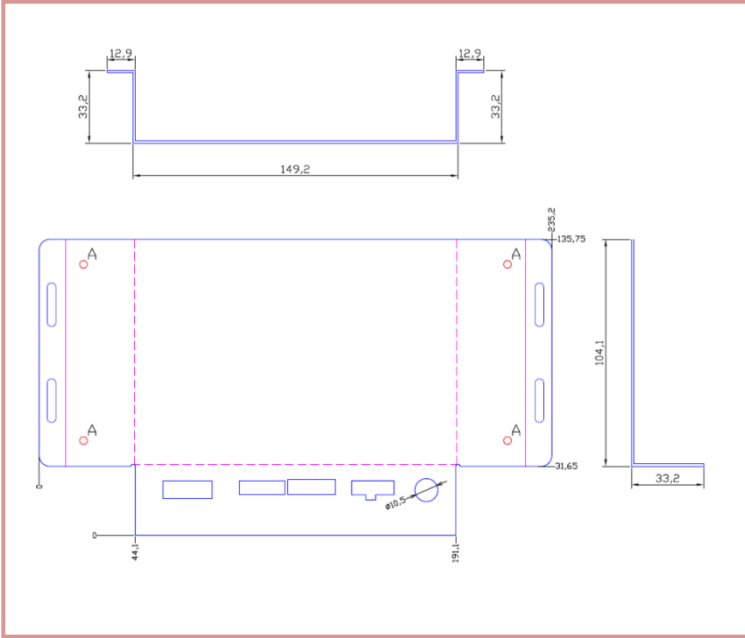
SBC2100 Specifications

| | | | |
|--------------------------|---|-----------------------|---|
| CPU | Freescale iMX6 Quad-core / Dual-core ARM Cortex™-A9 @ 1GHz | Storage | 1 × microSD card slot |
| | | | 1 × SATA 2Gb/s connector |
| RAM | 1GB DDR3 (Dual-core) / 2GB DDR3 (Quad-core) | I/O Interfaces | 1x miniPCI-e connector (for 3G module) |
| NAND Flash | 4GB flash (eMMC) | | 1 × USB2.0 OTG port (type B connector) |
| Display Interface | 1 × TTL LCD connector | | 1 × (2 × 4 header) RS-232 port |
| | 1 × LVDS connector (2-channel) | | 1 × (2 × 4 header) RS-485 port |
| | 1 × HDMI 1.4 connector | | 1 × (2 × 4 header) console port |
| Touch Interface | 1 × 4-wire resistive touch connector | | 2 × USB 2.0 host ports (type A connectors) |
| | 1 × capacitive touch screen connector | | 1 × (1 × 3 header) I ² C master port |
| Audio Interface | 1 × mic , 1 × headphone, 1 x Line-in | Power Adapter | DC +12 V / 3A |
| | 2 × (L/R) speaker connector | Dimension | 146 mm × 101 mm × 23 mm |
| Network | 1 × 10/100 /1Gb Ethernet (RJ-45) | Weight | Approx. 120 g |
| OS supported | Android 4.2 / Ubuntu 11.10 | Environment | Operating temperature: 0 °C to 60 °C |

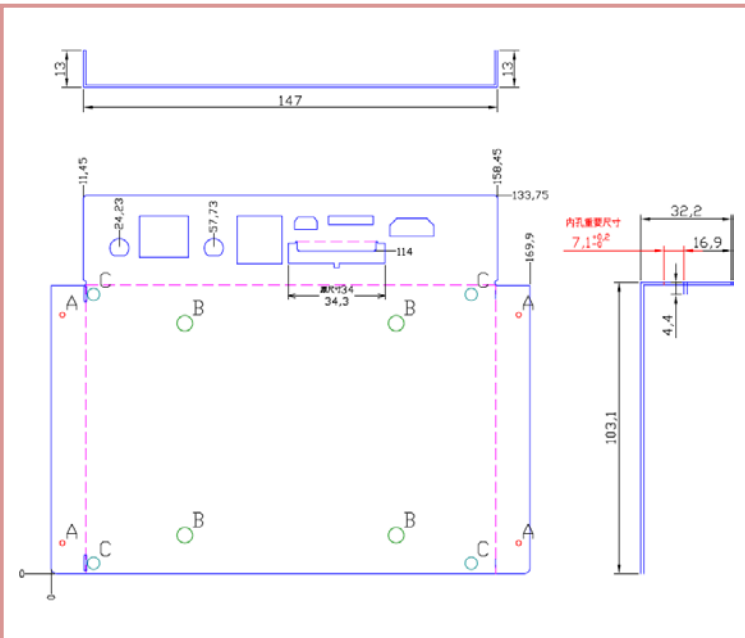
SBC2100 Block Diagram



EC2100 Outline Drawing (Top)

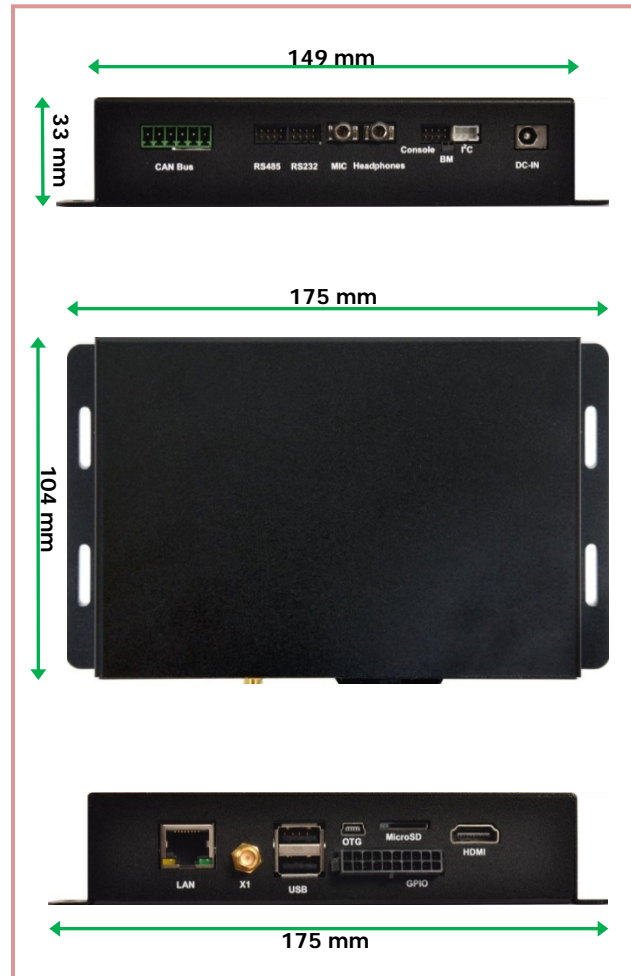


EC2100 Outline Drawing (Bottom)



EC2100 Overview

The EC2100 is a compact-sized embedded computer based on the SBC2100 single board computer. The light weight aluminum enclosure enables users to rapidly deploy the EC2100 in a wide range of commercial and industrial applications.



EC2100 Specifications

| | | | |
|----------------------|---|-----------------------|--|
| CPU | Freescale iMX6 Quad-core / Dual-core ARM Cortex™-A9 @ 1GHz | I/O Interfaces | 1 × microSD card slot |
| RAM (DDR3) | 1GB (Dual-core) / 2GB (Quad-core) | | 1 × MIC / 1 x headphone |
| NAND Flash | 4GB flash (eMMC) | | GPIO x 8-bit |
| Display | 1 × HDMI 1.4 connector | | 1 × USB2.0 OTG port (type B connector) |
| Network | 1 × 10/100 /1Gb Ethernet (RJ-45) | Weight | 2 × USB 2.0 host ports (type A connectors) |
| OS supported | Android 4.2 / Ubuntu 11.10 | Environment | Approx. 280 g |
| Power Adapter | +12V / 3A | Dimension | Operating temperature: 0 °C to 60 °C |
| | | | 175mm x 104mm x 33mm |

SBC2100 Ordering Information

(** Note: Not all models are available now. Contact our sales representative for more details.)

| Part No. | OS | CPU | RAM | CAN Bus | GPIO | Over-Voltage /Current Protection | Common Specifications |
|----------------|---------|------------------------|-------------|---------|--------|----------------------------------|--|
| SBC2100FD-QU | Ubuntu | iMX6Q Quad- Core | 2GB DDR3 | NO | 8-bit | NO | 4GB NAND Flash, LCD / LVDS / HDMI Touch I/F (resistive/capacitive) Audio LAN / USB host / USB OTG RS232 / RS485, MicroSD / SATA I2C master port Power adapter (+12V) |
| SBC2100FD-QA | Android | | | YES | 16-bit | YES | |
| SBC2100FD-QU-V | Ubuntu | | | | | | |
| SBC2100FD-QA-V | Android | | | | | | |
| SBC2100FD-DU | Ubuntu | iMX6D Dual- Core | 1GB DDR3 | NO | 8-bit | NO | |
| SBC2100FD-DA | Android | | | YES | 16-bit | YES | |
| SBC2100FD-DU-V | Ubuntu | | | | | | |
| SBC2100FD-DA-V | Android | | | | | | |

SBC2100 Optional Modules

| Part No. | Description |
|-----------|--|
| WLS-006 | (BL-8723 WiFi + BT) + Antenna (8cm/2dBi, SMA plug reverse) |
| D100 | 2-ch Video capture (NTSC/PAL) module |
| D120 | 4xCOM port module (4x RS232/RS422 module) |
| WCDMA-001 | Quad Band 3G (WCDMA) module + GPS |

EC2100 Ordering Information

(** Note: Not all models are available now. Contact our sales representative for more details.)

| Part No. | OS | CPU | RAM | CAN Bus | GPIO | Over-Voltage / Current Protection | Aluminum Case | Common Specifications |
|---------------|---------|------------------------|-------------|---------|--------|-----------------------------------|---------------|---|
| EC2100FD-QU | Ubuntu | iMX6Q Quad- Core | 2GB DDR3 | NO | 8-bit | NO | YES | 4GB NAND Flash, HDMI Audio (MIC, Ear-Phone) LAN / USB host / USB OTG RS232 / RS485, MicroSD I2C master port Power adapter (+12V) |
| EC2100FD-QA | Android | | | YES | 16-bit | YES | | |
| EC2100FD-QU-V | Ubuntu | | | | | | | |
| EC2100FD-QA-V | Android | | | | | | | |
| EC2100FD-DU | Ubuntu | iMX6D Dual- Core | 1GB DDR3 | NO | 8-bit | NO | | |
| EC2100FD-DA | Android | | | YES | 16-bit | YES | | |
| EC2100FD-DU-V | Ubuntu | | | | | | | |
| EC2100FD-DA-V | Android | | | | | | | |

EC2100 Optional Modules

| Part No. | Description |
|----------|--|
| WLS-006 | (BL-8723 WiFi + BT) + Antenna (8cm/2dBi, SMA plug reverse) |