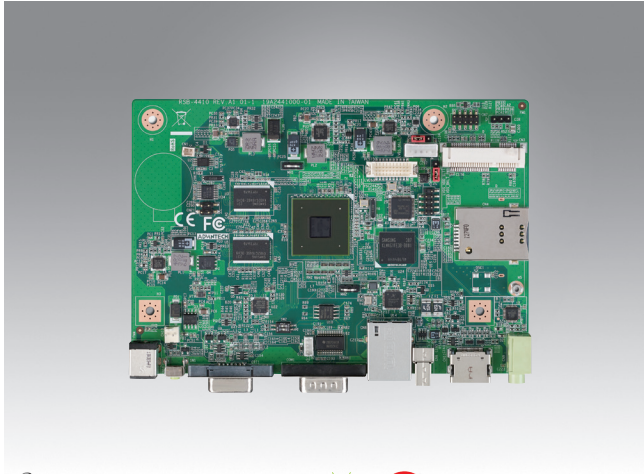


RSB-4410

Freescale ARM Cortex-A9 i.MX6 SBC



Features

- Freescale Cortex-A9 i.MX6 Dual/Quad core 1.0 GHz
- On-board DDR3 Up to 2GB & 4 GB eMMC NAND Flash
- Supports full HD 1080P H/W video codec engine
- Networking capability of Giga LAN, WiFi, 3G
- Low power consumption
- Supports Linux BSP V3.0.35/ Android 4.2.2



Introduction

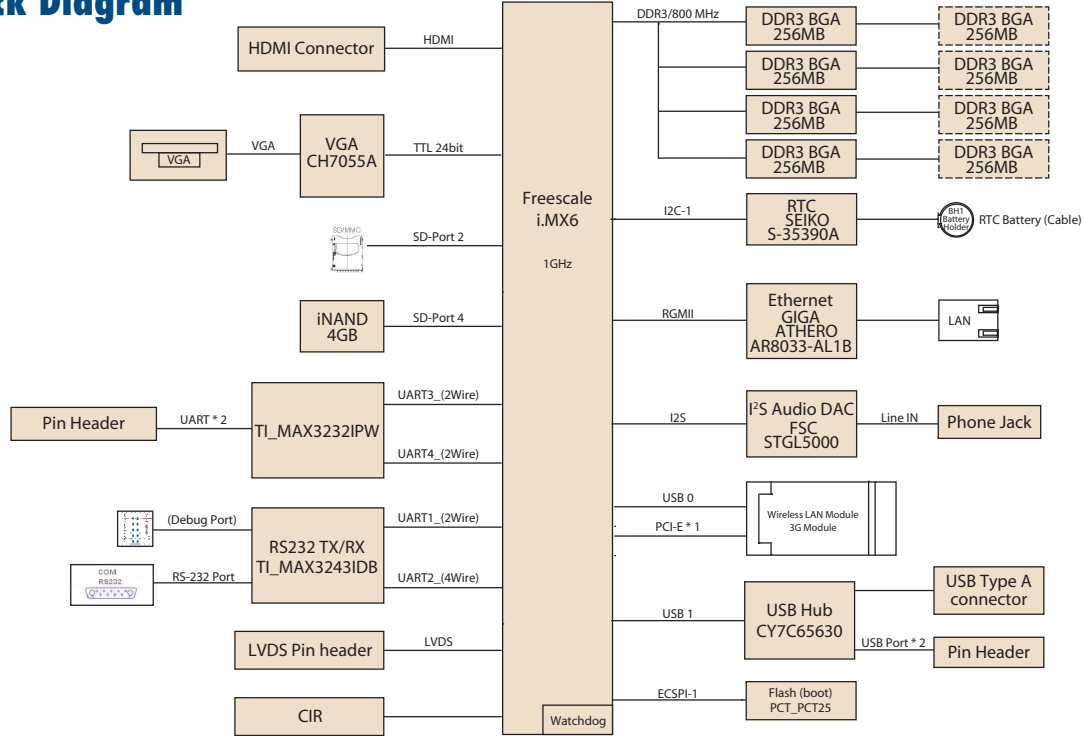
RSB-4410 is an Advantech RISC 3.5" SBC powered by Freescale ARM® Cortex-A9 i.MX6 high performance processor, which provide sufficient power for Full HD video encoding/decoding, and also support Gigabit Ethernet for networking. RSB-4410 also supports miniPCIe and SIM card slot for WiFi and 3G module. Advantech will provide Linux BSP V3.0.35 or Android BSP 4.2.2 for customer building up their own application software.

Specifications

| | | |
|------------------|--|--|
| Form Factor | 3.5" SBC | |
| Processor System | CPU | Freescale ARM Cortex-A9 i.MX6 Dual 1GHz Freescale ARM Cortex-A9 i.MX6 Quad 1GHz |
| | Technology | DDR3 1066 MHz |
| | Capacity | On-board DDR3 1GB On-board DDR3 2GB |
| | Flash | 4 GB eMMC NAND Flash for O.S. and 4 MB SPI NOR Flash for Advantech boot loader |
| Graphics | LVDS | 1 single channel 18/24-bit LVDS |
| | HDMI | 1 |
| | VGA | 1 |
| | Graphics Engine | 3 IPUs, OpenGL ES 2.0 for 3D, BitBlit for 2D and OpenVG 1.1 |
| H/W Video Codec | Decoder: | MPEG-4 ASP, H.264 HP, H.263, MPEG-2 MP, MJPEG BP |
| | Encoder: | MPEG-4 SP, H.264 BP, H.263, MJPEG BP |
| Ethernet | Chipset | Freescale i.MX6 integrated RGMII |
| | Speed | 1 x 10/100/1000 Mbps |
| WatchDog Timer | 256-level timer interval, from 0 ~ 128 sec | |
| I/O | SATA | - |
| | SATA Power | - |
| | USB | 1 x USB Type A and 2 x USB pin header |
| | Audio | 1 x Line-out |
| | SPDIF | - |
| | SDIO | - |
| | Serial Port | 2 x 2 wires RS-232 pin header 1 x 4 wires RS-232, DB9 |
| | SPI | - |
| | CAN | - |
| | GPIO | - |
| | I2C | - |
| | System Bus | - |
| | Touch | - |
| I/R | 1 I/R remote control pin header | |
| Button | 1 x Reset button | |
| Expansion | Mini PCIe | 1 x mini PCIe slot |
| | SD Socket | 1 x SD slot |
| | SIM | 1 x SIM slot |
| Power | Power Supply Voltage | 12 V |
| | Power Type | DC-in |
| | Power Consumption | 2.3 Watts |
| Environment | Operational Temperature | 0 ~ 60° C / -40 ~ 85° C |
| | Operating Humidity | 5%-95% Relative Humidity, non-condensing |
| Mechanical | Dimensions (W x D) | 146 x 102 x 20 mm |
| Operating System | Linux V3.0.35/ Android 4.2.2 | |
| Certifications | CE/FCC Class B | |

RSB-4410

Block Diagram



Ordering Information

| Part No. | CPU | Memory | Flash | HDMI | VGA | LVDS | LAN | Serial Port | SATA | USB Host | System bus | SD | CANbus | Operating Temperature |
|------------------|----------------------------|--------|-------|------|-----|------|-----|-------------------------------|------|----------|------------|----|--------|-----------------------|
| RSB-4410CD-MDA1E | Freescale i.MX6 Dual 1 GHz | 1 GB | 4 GB | 1 | 1 | 1 | 1 | 2 x 2 wire RS-232, 1 x RS-232 | - | 3 | - | 1 | - | 0 ~ 60° C |
| RSB-4410WD-MDA1E | Freescale i.MX6 Dual 1 GHz | 1 GB | 4 GB | 1 | 1 | 1 | 1 | 2 x 2 wire RS-232, 1 x RS-232 | - | 3 | - | 1 | - | -40 ~ 85° C |
| RSB-4410CQ-MEA1E | Freescale i.MX6 Quad 1GHz | 2 GB | 4 GB | 1 | 1 | 1 | 1 | 2 x 2 wire RS-232, 1 x RS-232 | - | 3 | - | 1 | - | 0 ~ 60° C |

Packing List

| Part Number | Description | Quantity |
|-------------|--------------|----------|
| RSB-4410 | RSB-4410 SBC | 1 |

Optional Accessories

| Part Number | Description |
|--------------------|--|
| 96PSA-A36W12R1 | Adapter 100-240 36W 12V 3A 9NA0362308 |
| 170203183C | Power Code 3P Europe (WS-010+WS-083)183cm |
| 170203180A | Power Cord 3P UK 2.5A/3A 250V 1.83M |
| 1700001524 | Power Cord 3P UL 10A 125V 180cm |
| 1960051438N001 | Cooler I-NB-ICH7 S-3W 31x31x12-WC DAC-BC05 40C |
| 96LEDK-A070WV35NB1 | Panel G070VW01 V1 |
| 1700021565-01 | Debug cable |
| 1700018730 | USB cable |
| 1700022161-01 | UART cable |
| 1700022130-01 | LVDS cable |
| 1700022131-01 | Backlight cable |