



### Features

- NXP Cortex™-A9, i.MX 6Dual processor
- Supports HDMI and dual LVDS
- 1GB DDR3, 4GB eMMC and SD socket for expansion
- Embedded I/O, COM, GPIO, USB, USB-OTG, audio and Ethernet
- M.2 E-Key (2230) and Mini PCI-E with SIM socket for wireless/4G/LTE connectivity

### Specifications

|                       |  |
|-----------------------|--|
| Form Factor           | 3.5-inch SBC   |
| Processor             | NXP Cortex™ -A9 i.MX 6Dual processor   |
| System Memory         | 1GB DDR3 on board  |
| Flash Memory          | 4GB eMMC on board (optional 8/16/32/64 GB)   |
| Display               | 2x 18/24-bits single LVDS /1x Dual LVDS, up to 1366 x 768 for 2ch, 1920 x 1080 for 1ch<br>1x HDMI V1.4, up to 1080P at 60Hz  |
| Video Codec           | <ul style="list-style-type: none"> <li>• 1080p60or30 + D1 Dual 1080p decode</li> <li>• 1080p30 H.264BP</li> <li>• Dual 720p encode</li> </ul>  |
| Graphics              | <ul style="list-style-type: none"> <li>• Vivante GC2000, OpenGL, GL ES 2.0 &amp; Haili, CL EP</li> <li>• Vivante GC355, OpenVG 1.1</li> </ul>  |
| Edge I/O              | 1x RJ45 GbE LAN<br>2x USB Type-A<br>1x USB OTG (mini-USB Type-B)<br>1x HDMI<br>1x RS232/422/485 (D-SUB 9 male connector)<br>1x SD socket (UHS-I SDR-104, max.104MB/s)<br>1x Reset button   |
| Internal I/O          | 1x Dual channel LVDS (FHD)<br>1x Backlight, 3.3V/1A, 5V/1A, 12V/1A (jumper selection)<br>2x USB 2.0 header<br>1x M.2 E-Key (2230) w/ USB, SDIO, UART, PCI-E<br>1x Mini PCI-E (USB only) w/ SIM socket<br>1x SATA & 4-pin header for the power, 5V/12V<br>2x CAN Bus 2.0B (2*3 pin header)<br>1x I <sup>2</sup> C header<br>1x 2-wire UART header (for Debug Console Port)<br>2x 2-wire UART (6-Pin header, 1.0mm)<br>1x Audio header (Line-in and Line-out)<br>8x GPIO (2*5 pin header 1.0mm)<br>3x green LEDs (for Power on/off, wireless status, and Programmable) |
| Expansion IO          | N/A  |
| Watchdog              | 256 Levels, 0~128 secs   |
| Dimensions            | 147mm x 102mm (5.8" x 4")  |
| Power Input           | 12V DC-in jack   |
| Operating Temperature | -40°C ~ 85°C (-40°F ~ 185°F)   |

|                   |                             |
|-------------------|-----------------------------|
| Relative Humidity | 10%~90% (non-condensing)    |
| OS Support        | Yocto v2.1<br>Android 6.0.1 |
| Certification     | CE/ FCC Class-B             |

### Ordering Information

|        |  |
|--------|--|
| IBR117 | 3.5" ARM-based SBC, NXP Cortex™ -A9, i.MX 6Dual 1GHz processor, 1GB DDR, 4GB eMMC, Dual LVDS, HDMI, RS-232/422/485, USB, M.2 E-Key (2230) and Mini PCI-E w/ SIM socket |
|--------|--|

### Dimensions

