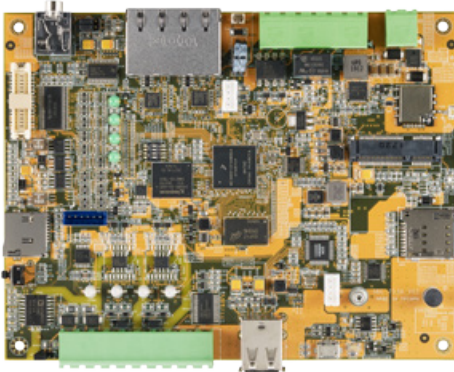


Linux-ready Cortex-A7 Single Board Computer

SBC-7530



Features

- NXP i.MX6ULL Cortex-A7 CPU, Up to 800MHz
- Linux kernel 5.4.x with boot loader & file system
- Toolchain: gcc 9.3.x + glibc 2.31
- 512MB DDR3/LvDDR3 SDRAM & 16GB eMMC
- Dual 10/100Mbps Ethernet Ports
- 1x CAN, 1x OTG USB, 2x HOST USB, 2x Digital Input, 1x Relay out, 2x RS-485, 1x RS-232
- 24bits LVDS display interface
- Reserved 1 x Touch sensor interface
- X11 Desktop environment
- 1 x miniPCIe slot & 1 x Micro-SIM socket & 1 x Micro-SD socket
- 1 x Temperature Sensor on board
- 1 x WLAN, 2.4G Single band WiFi support 802.11b/g/n
- Compact Size: 150mm x 115mm
- +9~48VDC Power Input

■ H/W Specifications

CPU/Memory

- CPU: NXP i.MX6ULL Cortex-A7 MPCore, Up to 800MHz
- SDRAM: 512MB, DDR3/LvDDR3
- eMMC: 16GB

Network Interface

- 2x10/100Mbps Ethernet (RJ45)
- Protection: 1.5KV magnetic isolation

TTY (Serial) Ports

- 2 x Isolated RS-485 (1500Vrms isolation), Signal: Data+, Data-
- 1 x RS-232 (TX/RX/GND)
- Connector: Terminal block

CAN Bus Ports

- 1 x CAN bus 2.0 A/B compliant ports
- Speed: Up to 1Mbps
- Connector: Terminal block

Console / Debug Ports

- 1 x Serial console port (inside the box)

USB 2.0 Host Interface

- 1 x USB OTG Port (microUSB connector)
- 2 x USB Host Port (USB Type-A connector)

Audio Out

- 1 x Line-out R/L port, optional Earphone R/L
- Connector: Earphone-Jack

Digital Input

- 2 x Digital Input channels
- Isolation Protection: 2500Vrms (Photo-Coupler)
- Logical High: 5~24VDC
- Power Requirement

Relay Output

- 1 x Relay out channel
- Contact Rating: 30VDC@1A or 125VAC@0.5A

Display Interface

- One LVDS 24bits digital Display interface
- Support max. 85 MHz display clock and up to WXGA (1366 x 768) at 60 Hz
- Support PWM(Pulse Width Modulation) for LCD brightness control

Touch Sensor Interface

- Support 4-wire resistive touch panel (USB interface)

Expansion

- 1 x miniPCIe Full-size sock (Full Size)
- 1 x micro-SIM card socket reserve

Temperature Sensor

- 1 x Temperature Sensor on board (I2C)

WLAN Interface

- 1 x WiFi Interface
- Frequency Band: 2.4G Single band
- IEEE standard support: 802.11b/g/n
- Antenna: 1T1R IIPLEX connector on board

SD Slot

- 1 x microSD socket
- SD 2.0 compliant, supports SDHC

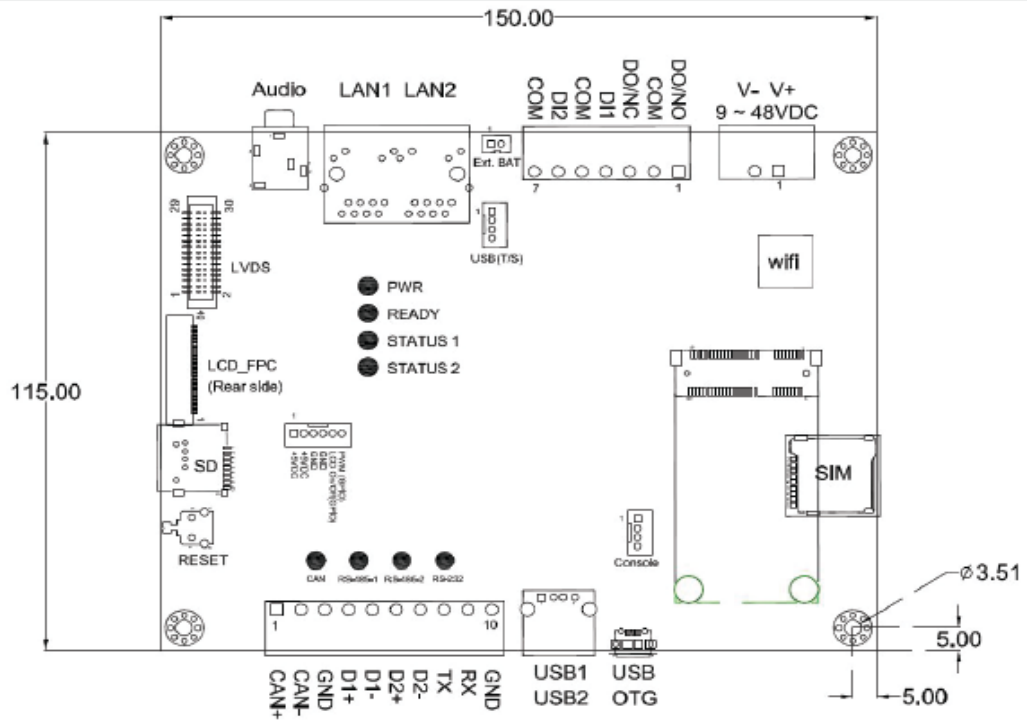
General

- Power Input: +9~48VDC
- Watch-Dog Timer: YES
- Real-Time Clock (RTC): YES
- Dimensions (W x L): 150mm x 115mm (5.9in x 4.5in)
- Mounting Hole x4 reserved , 3.0mm (M3) in diameter
- Consumption: 2.16Watts (NO expansion module / LCD)
- 1 x Reset Switch
- LEDIndicators: Power LED, Ready LED, Status LED (User define) x2

Linux-ready Cortex-A7 System on Module

SBC-7530

I/O Location



S/W Specifications

Operation System

- Linux kernel 5.4.x
- Support bootup from eMMC or SD card
- Supports backup from SD card or USB device
- Boot Loader : Barebox
- File System : EXT4/EXT3/EXT2, VFAT/FAT, NFS

Desktop Environment

- Matchbox (X11 Desktop Environment)
- Built-in Firefox / Chromium browser + virtual keyboard

Software Development

- Toolchain: gcc 9.3.0 + glibc 2.31
- Supports in-place C/C++ code compilation

Package Management

- Package repository: Artila self-maintained repository
- Command: Using standard apt-get command

Popular Packages

- Web server: Apache/Nginx/Lighttpd
- Database: MySQL/SQLite3/PostgreSQL
- Script Language: PHP/Python/Perl/NodeJS
- Text editor: vim/nano/sed
- Administration: Webmin

Ordering Information

SBC-7530

- Linux-ready Cortex-A7 800MHz Single Board Computer, with 512MB SDRAM&16G eMMC, LAN /USB/UART/I2C/CAN, Digital I/O, Relay out, mPCIe slot, Display Interface, Audio

CB-RJ45F9-150 (91-R45F9-150)

- Serial Cable (RJ45 to DB9 Female, 150cm)

PWR-12V-1A (31-62100-000)

- 110~240VAC to 12VDC 1A Power Adapter

Starter Kit

SBC-7530 starter Kit

- SBC-7530 single board computer with 7" Touch LCD module

