

DMI-1210

12.1" Driver HMI with Intel Atom® x5-E3930 Processor

Features

- Intel Atom® x5-E3930 processor, up to 1.8GHz
- 12.1" color display: 4:3, 1024x768 pixels, 600cd/m2, 5-wire resistive touch
- Isolated 2x M12 GbE, 2x DB-9 serial and 1x M8 USB 1.1 ports
- MVB/CAN bus support by PC/104 or Mini PCI Express add-on module
- Built in GNSS and two Mini PCI Express card slots for cellular modem with USIM
- Nominal Voltage: 24VDC, 36VDC, 72VDC and 110VDC (EN50155 compliant)
- IP65 front and IP20 rear ingress ratings



Specifications

System

Processor

Intel Atom® x5-E3930 processor, 1.3GHz dual-core with ECC (TDP 6.5W)

Display

12.1", 4:3 TFT LCD
 600cd/m2 luminance
 700:1 contrast ratio
 1024x768 pixel resolution
 5-wire resistive touch
 Software controlled brightness

Memory

DDR3L-1600MHz 4GB by SODIMM (optional 8GB)

Storage

1x M.2 slot for SATA module onboard
 1x CFast slot, accessible with cover
 eMMC 5.0 32GB by default, 64GB by request

Ethernet

2x 1000BASE-T Ethernet ports based on Intel® I210-IT
 2kV isolation
 Supports WOL and teaming

USB

1x USB 1.1 port with 2kV isolation and M8 connector
 1x USB 3.0 Type A port with dust cover for maintenance
 1x USB 2.0 wafer connector onboard

Light Sensor

Sensor on front bezel to detect ambient illuminance
 ready for auto-dimming application development (contact your ADLINK representative)

External I/O

2x GbE ports via M12 connector
 1x USB 1.1 via M8 connector
 1x USB 3.0 via Type A connector with cover
 2x DB-9 connectors for MVB or CAN bus
 1x Mic-in and Line-out port via M8 connector
 2x DB-9 RS-232/422/485 serial ports
 5x antenna cutouts

Internal I/O

2x full size Mini PCI Express slots
 2x micro-SIM slots (one is on the bottom side of mainboard)
 1x USB 2.0 wafer connectors
 One PC/104 slot

Wireless

2x Mini PCIe card slots are available for cellular modem or WLAN modules
 Compliant to Mini PCIe card spec v1.2 (PCIe and USB 2.0)
 Each Mini PCIe slot supports one micro-SIM
 4x RP-SMA antenna connector cutouts

GNSS

Built in 72 channel high sensitivity GNSS receiver
 GPS/QZSS L1 C/A, GLONASS L10F, BeiDou B1I, Galileo E1B/C
 SBAS L1 C/A: WAAS, EGNOS, MSAS, GAGAN
 1x SMA antenna connector

MVB

Supported by PC/104 or Mini PCIe card with two DB-9 outputs

CAN

Supported by Mini PCIe card with two DB-9 outputs

Power Supply

One 4-pin A-coded M12 connector
 +24V/+36V/+72V/+110VDC nominal power input (16.8V to 137.5V, EN50155 compliant)

Power Consumption

Max. 22W at 100% loading of CPU

Specifications

• Mechanical

Dimension

310 x 248 x 87.3 mm (w/o power connector)

IP rating

IP65 front, IP20 rear (IP42 rear by request)

Weight

4.6 kg without add-on modules

• Status LEDs

Power Status

GbE Activity

COM Tx/Rx Activity

• Software

BIOS

AMI

Board management

ADLINK SEMA 3.5 for WDT, hardware monitor, and fail-safe dual BIOS

OS

Linux Ubuntu 16.04 LTS, Qt compatible, 64-bit

Windows 10

• Environmental

Operating Temperature

-25°C to +70°C, EN50155 OT3 class

Storage temperature

-40°C to +85°C

Humidity

10-90% RH operating, non-condensing

5-95% RH storage, EN 60068-2-30, EN 50155

Vibration

EN50155 standard, method EN61373: 2010, Category 1 Class B

Shock

EN50155 standard, method EN61373: 2010, Category 1 Class B

Safety

EN50124-1(isolation compliance)

EMC

EN 50155, EN 50121-3-2

EN 303413 (GNSS)

EN 301489-1, EN 301489-19 (GNSS)

Altitude

4572m (15000ft) at 25°C

MIL-STD-810G Method 500.5, Procedure II2

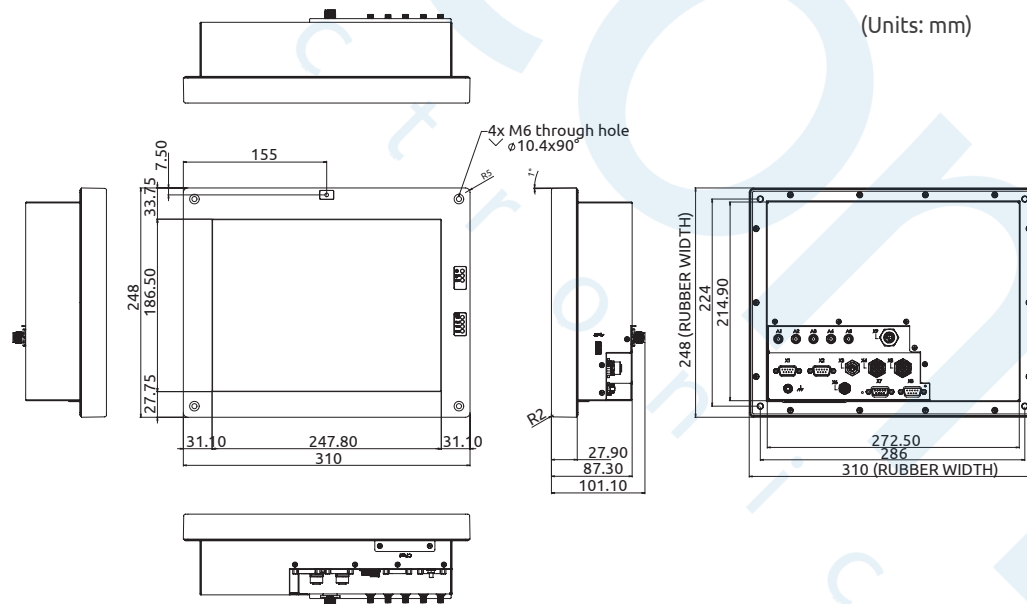
Mechanical Layout



Ordering Information

- DMI-1210-02, CC**
 12.1" touch panel PC, Intel Atom® x5-E3930, DDR3L 1600 4GB, no GNSS, no Mini PCIe cellular modules, no MVB module, IP20, conformal coating
- Starter cable kit-DMI-A**
 1x 4-pin A-coded M12 AC/DC power supply cable
 2x 8-pin A-coded M12 to RJ45 Ethernet cable
 1x 4-pin M8 to type A USB 1.1 cable
 1x 6-pin M8 to microphone and speaker cable
 2x 9-pin D-sub male-to-female cables for MVB
- PC/104 MVB kit**
 1x PC/104 MVB card, Duagon D113L.T.-P4B2 (PD only, EMD type)
 2x 9-pin D-sub male-to-female cables
- Mini PCIe Card MVB kit**
 1x Mini PCIe MVB card, Duagon D017M-P-T-I1-Y30C-M3 (PD only, EMD type)
 1x Y-split cable to 9-pin D-sub 1x male + 1x female (TBD)
- Mini PCIe Card CAN bus kit**
 1x Mini PCIe CAN card, ANTZER FARO-HS100
 1x Y-split cable to 9-pin D-sub 2x male
- Mini PCIe Card cellular kit 01 (for TW, China)**
 1x Mini PCIe GSM/TD-SCDMA/CDMA/WCDMA/LTE module (SIMCOM SIM7100C-PCIE)
 2x external antennas
 2x internal RF cables
- Mini PCIe Card cellular kit 02 (for Europe)**
 1x Mini PCIe GSM/TD-SCDMA/CDMA/WCDMA/LTE module (SIMCOM SIM7100-PCIE)
 2x external antennas
 2x internal RF cables
- Mini PCIe Card WiFi/BT kit**
 1x Mini PCIe WiFi/BT module (AMPAK AP12356_I)
 2x external antennas
 2x internal RF cables

Mechanical Drawing



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