SP-803

8” Smart Panel with Intel® Atom™ N455 Processor

Features

- Intel® Atom™ Processor N455 (512K Cache, 1.66 GHz)
- 1 x DDR3 667MT/S SO-DIMM module up to 2GB
- 1 x mini PCIe and 1 x SIM card slots for function expansion (such as WiFi/BT or 3G module)
- Stackable expansion capability
- Support 2 LAN ports
- 4-wire resistive touch sensor
- Optional for high brightness, sunlight readable version

System Spec

Processor	Intel® Atom™ Processor N455 (512 KB Cache, 1.66 GHz)
South Bridge	Intel ICH8-M
Super I/O	ITE IT8781F
Main Memory	1x DDR3 667MT/S SO-DIMM module up to 2 GB
Graphics	Integrated GMA 3150 Graphic Controller Supports VGA Analog display up to 1400 x1050@60hz
LCD	Supports 24-bit TTL LVDS LCD at a resolution of 800x600 Size: 8.0 inch, 4:3 panel Resolution: 800 x 3 (RGB) x 600 Back light: LED Contrast Ratio: 500 typical Standard brightness: 250 Cd/m² typical (without touch) Optional brightness enhancement: 800 Cd/m² typical (without touch)
Storage	Supports 3 SATA II (2x SATA II on the motherboard)
Mini PCI-e Expansion	1x mini PCI-e card slot for expansion module
SIM Card Slot	Onboard slot supporting SIM cards
VGA I/F	1x flex cable connector for VGA signal
Touch Sensor	Optional four-wire resistive touch sensor

I/O Interface

Ethernet	2x GbE ports
Serial Ports	2x COM ports (RS232) 2x COM ports, TTL level (RTS/TXD/RXD)
USB Signals	8x USB 2.0 ports (6 on BTB connector, and 2 on IO Connector B)
Audio Signals	1x mic-in, 1x line out

Extension BTB I/O

1. LPC bus
2. 1x SATA II
3. 3x PCIe x1
4. 6x USB port
5. IDE bus
6. SM bus

Power Supply

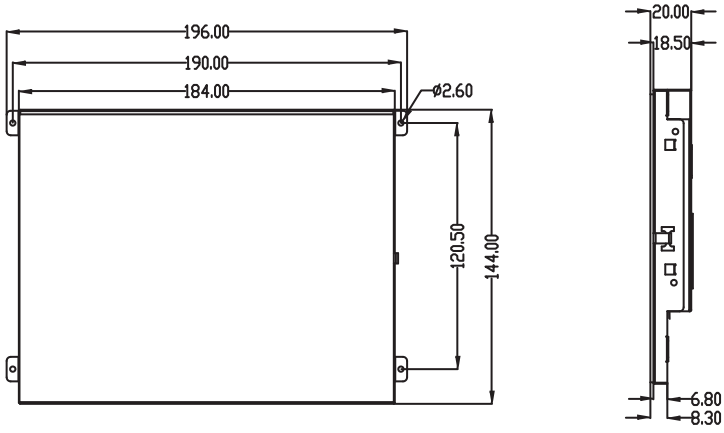
DC Input	DC input at 19 V DC +/- 10% (DC power must be supplied from an ADLINK IO board or external DC board)
Battery Pack (optional)	11.1 V , 3S1P Li-Polymer battery pack for AC power loss backup (battery pack must be connected with an ADLINK IO board or external DC board)
Power Consumption	Fully loaded: 29.1 W

Environmental

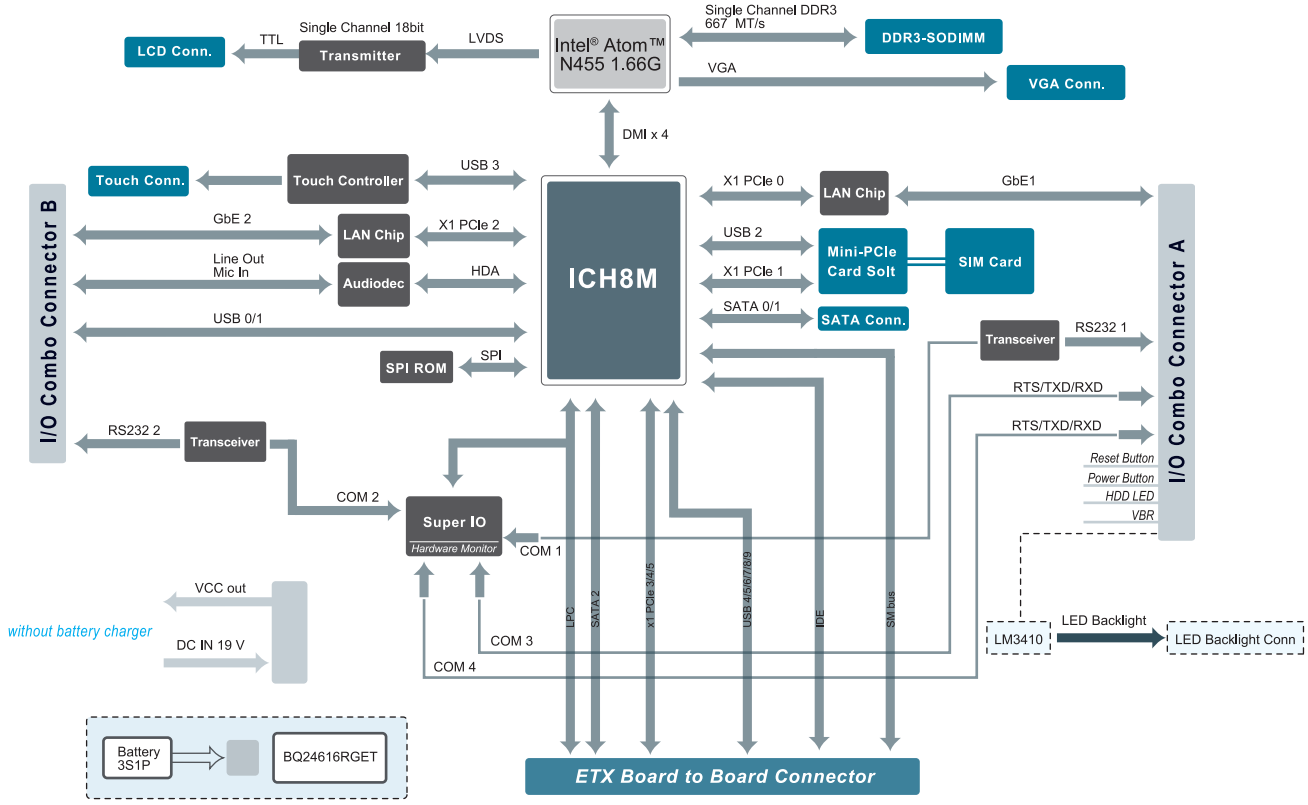
Operating Temperature	Standard: 0°C to 60°C
Storage Temperature (Non-Operation)	-30°C to 80°C
Humidity	0 - 90% @ 40°C (non-condensing)
Certification	CE and FCC CLASS A/B Compliance

Dimensions / Weight

Units: mm / g	196 mm x 144 mm / 572.5 g



CPU Block Diagram



Ordering Information

Smart Panel

Model Number	Description/Configuration
SP-803-NNSR	SP-803-NNSR(G) Optical-enhanced LCD display with 4-wire resistive touch sensor
SP-803-NNAR	SP-803-NNAR(G) Standard LCD display with 4-wire resistive touch sensor

Starter Kit

Model Number	Description/Configuration
SP-803-NNSR -EWP	SP-803-NNSR-EWP(G)Starter kit of SP-803-NNSR with I/O board 1 (SP-803-IO1), fan heat spreader, 2Gb DDR3 module, 2.5" HDD, cable kits, stand, and power adaptor
SP-803-NNAR -EWP	SP-803-NNAR-EWP(G)Starter kit of SP-803-NNAR with I/O board 1 (SP-803-IO1), fan heat spreader, 2Gb DDR3 module, 2.5" HDD, cable kits, stand, and power adaptor

Accessories (optional)

Model Number	Description/Configuration
SP-803 I/O1 Kit	Including SP803-IO1 Board: Right-angle connectors I/O board of DC 19V IN, DC 5V OUT (for 2.5" HDD), 2x RS232, 4x USB, 2x LAN RJ45, Mic in, Line Out, internal IO connectors and I/O cables
Power Kit	AC-DC ADAPTER 90W with US Power Cord 10A, 125V

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

ADLINK Technology:

SP-803-NNAR-EWP SP-803-NNSR-EWP SP-803-SR-SK SP-803-AR-SK SMARTPANEL-IO-BRD6 SMARTPANEL-IO-BRD5 SP-803-IO2 SP-803-NNSR SP-803-NNAR SP-803-IO1 SP-803-IO-CBL-KIT ACDC-ADPT-90W