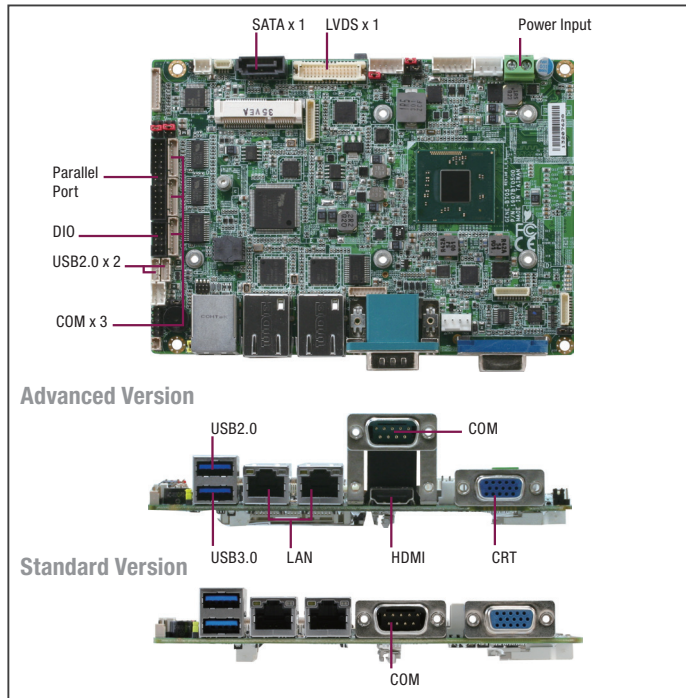


3.5" SubCompact Board with Intel® Atom™ and Celeron® Processor SoC



Features

- Onboard Intel® Atom™ and Celeron® Processor SoC
- DDR3L 1066/1333 MHz SODIMM x 1, Up to 8 GB
- Gigabit Ethernet x 2, RJ-45 x 2
- CRT, 18/24-bit Dual-Channel LVDS LCD, HDMI
- 2CH HD Audio
- SATA 3.0 Gb/s x 1, CFAST™ x 1
- USB 3.0 x 1, USB2.0 x 3, COM x 4, 8-bit Digital I/O
- Mini-Card x 2 (Full-size x 1, Half-size x 1)
- DC 12V, AT/ATX Mode
- Onboard 4/5/8-wire Resistive Touch Screen Controller (Optional)
- AAEON Hi-Safe/SDK/Utility Supported
- mSATA x 1 (Optional, Share Mini-Card Interface)
- Onboard Trusted Platform Module (Optional)



Specifications

System	
Form Factor	3.5" SubCompact Board
CPU	Intel® N2930/N2807/J1900/E3845/E3825
CPU Frequency	Up to 2.0GHz
Chipset	Intel® N2930/N2807/J1900/E3845/E3825
Memory Type	DDR3L 1066/1333, SODIMM x 1
Max. Memory Capacity	Up to 8G
BIOS	UEFI
Wake on LAN	Yes
Watchdog Timer	255 Levels
Power Requirement	+12V
Power Supply Type	AT/ATX
Power Consumption (Typical)	Intel® N2930, DDR3L 1600MHz 8G, 0.65A@+12V
Dimension (L x W)	5.75" x 4" (146mm x 101.6mm)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C) or WITAS 2 (E3825)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	111,000
Certification	CE/FCC
Display	
VGA/LCD Controller	Intel® N2930/N2807/J1900/E3845/E3825
Video Output	CRT+LVDS, HDMI+LVDS, CRT+HDMI
Backlight inverter supply	Up to 24-bit dual-channel LVDS x 1
I/O	
Ethernet	Intel® I211 (or 210), 10/100/1000Base-TX, RJ-45 x 2
Audio	High definition audio interface
USB Port	USB2.0 x 3, USB 3.0 x 1
Serial Port	RS-232 x 2, RS-232/422/485 x 2
Parallel Port	SPP/EPP/ECP x 1
HDD Interface	SATA 2.0 x 1
FDD Interface	—
SSD	CFAST™ (alternative with mSATA by BOM and also occupy one Mini-Card location)
Expansion Slot	Mini-Card x 2(Full-size x 1, Half-size x 1)
DIO	8-bit
SIM	x 1
TPM	x 1
Touch	x 1

Packing List

- GENE-BT05 with Passive Heatsink

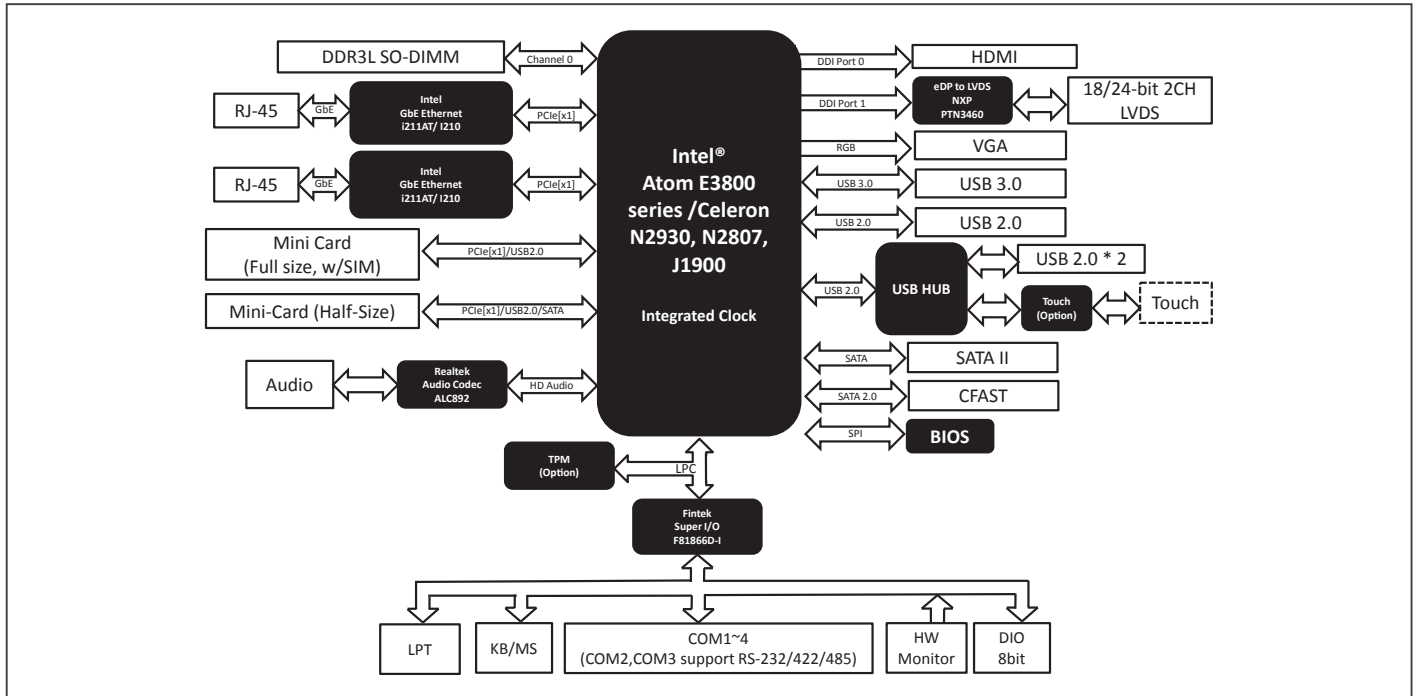
Optional Accessories

Part Number	Description	QTY
1700050207	(TF)USB CABLE, 1*5P Pitch=1.25mm Housinh, 20cm, for PFM-945C	2
1701090150	(TF)Flat Cable, D-Sub 9(M), 9P Housing, 9P 1.25mm pitch Housing, 15cm	3
1709100254	(TF)PHONE JACK Cable, 3P AUDIO JACK, 1*10P 1.25mm HOUSING(F), 25cm	1
1709070500	(TF)SATA CABLE, 7P Pitch 1.27mm, 50cm	1
1701260200	(TF)Flat Cable, 25P D-SUB FEMALE, 26P 2.00mm Pitch Housing, 20cm	1
170204010R	(TF)Power Cable, Double 4P 5.08mm Housing(M), 10cm	1
1702150155	(TF)Power Cable, 15P SATA(F), 2P 2.0mm Housing(PH), 15cm	1
170220020B	(TF)Power Cable, 20P ATX(M), 4P 5.08mm Housing(F), +3P 2.5mm Housing(XH), 20cm	1
1700060157	(TF)Cable, 6P 2.0mm Housing, 6P JACK W/SCREW KB&MS, 15cm	1

OS Support

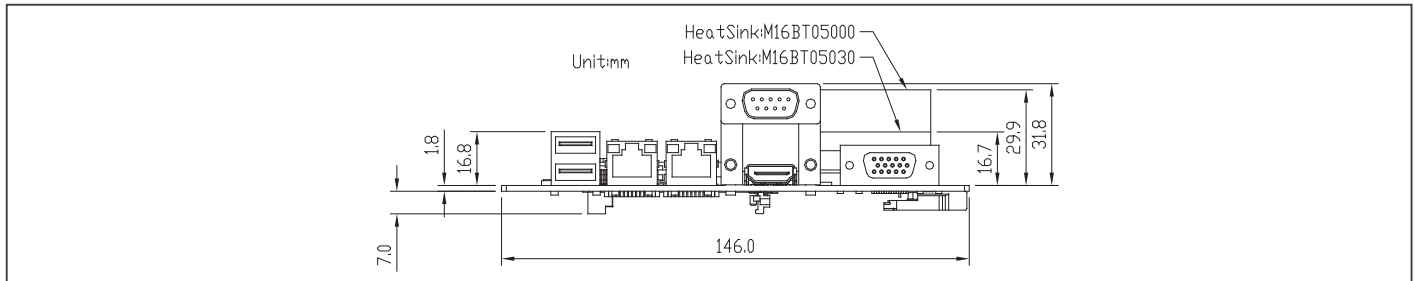
Part Number	Description
OS-W10R-600-00000-EN	Windows 10 IoT Enterprise, for Retail or ThinClients, 64bit MultiLang. (EngFreChiTChiSJanKor)
OS-WE8S-600-GBT5A-EN	Windows Embedded 8 Standard, x64 Full size English.
OS-WS7E-600-GBT5A-EN	Windows Embedded Standard 7, E SKU x64 Full size English.

Block Diagram



Dimension

Unit: mm



Ordering Information

Part Number	CPU	Fan/ Fanless	Display	LVDS	Storage	LAN	USB	RS-232	RS-232/422/485	Expansion Slot	Power	Power Temp	Others
GENE-BT05-A10-0001	Intel® Celeron® N2930	Fanless	CRT + LVDS, LVDS + HDMI, HDMI + CRT	24bit, 2CH	SATA x 1, CFAST™ x 1	Gbe x 2	USB 3.0 x 1, UBS2.0 x 3	2	2	Mini Card x 2 (Full-Size x 1, Half-Size x 1)	+12V, AT/ATX	0°C ~ 60°C	TPM, Touch, SIM, DIO x 8
GENE-BT05-A10-0002	Intel® Celeron® N2930	Fanless	CRT + LVDS	24bit, 2CH	SATA x 1 mSATA x 1 (Half Size)	Gbe x 2	USB 3.0 x 1, UBS2.0 x 3	2	2	Mini Card x 1 (Full-Size)	+12V, AT/ATX	0°C ~ 60°C	DIO x 8
GENE-BT05-A10-0003	Intel® Celeron® N2807	Fanless	CRT + LVDS, LVDS + HDMI, HDMI + CRT	24bit, 2CH	SATA x 1, CFAST™ x 1	Gbe x 2	USB 3.0 x 1, UBS2.0 x 3	2	2	Mini Card x 2 (Full-Size x 1, Half-Size x 1)	+12V, AT/ATX	0°C ~ 60°C	TPM, Touch, SIM, DIO x 8
GENE-BT05-A10-0004	Intel® Celeron® N2807	Fanless	CRT + LVDS	24bit, 2CH	SATA x 1 mSATA x 1 (Half Size)	Gbe x 2	USB 3.0 x 1, UBS2.0 x 3	2	2	Mini Card x 1 (Full-Size)	+12V, AT/ATX	0°C ~ 60°C	DIO x 8
GENE-BT05-A10-0005	Intel® Atom™ E3845	Fanless	CRT + LVDS, LVDS + HDMI, HDMI + CRT	24bit, 2CH	SATA x 1, CFAST™ x 1	Gbe x 2	USB 3.0 x 1, UBS2.0 x 3	2	2	Mini Card x 2 (Full-Size x 1, Half-Size x 1)	+12V, AT/ATX	0°C ~ 60°C	TPM, Touch, SIM, DIO x 8
GENE-BT05-A10-0006	Intel® Atom™ E3845	Fanless	CRT + LVDS	24bit, 2CH	SATA x 1 mSATA x 1 (Half Size)	Gbe x 2	USB 3.0 x 1, UBS2.0 x 3	2	2	Mini Card x 1 (Full-Size)	+12V, AT/ATX	0°C ~ 60°C	DIO x 8
GENE-BT05-A10-0007	Intel® Atom™ E3825	Fanless	CRT + LVDS, LVDS + HDMI, HDMI + CRT	24bit, 2CH	SATA x 1, CFAST™ x 1	Gbe x 2	USB 3.0 x 1, UBS2.0 x 3	2	2	Mini Card x 2 (Full-Size x 1, Half-Size x 1)	+12V, AT/ATX	0°C ~ 60°C	TPM, Touch, SIM, DIO x 8
GENE-BT05-A10-0008	Intel® Atom™ E3825	Fanless	CRT + LVDS	24bit, 2CH	SATA x 1 mSATA x 1 (Half Size)	Gbe x 2	USB 3.0 x 1, UBS2.0 x 3	2	2	Mini Card x 1 (Full-Size)	+12V, AT/ATX	0°C ~ 60°C	DIO x 8
GENE-BT05-A10-0009	Intel® Celeron® J1900	Fanless	CRT + LVDS, LVDS + HDMI, HDMI + CRT	24bit, 2CH	SATA x 1, CFAST™ x 1	Gbe x 2	USB 3.0 x 1, UBS2.0 x 3	2	2	Mini Card x 2 (Full-Size x 1, Half-Size x 1)	+12V, AT/ATX	0°C ~ 60°C	TPM, Touch, SIM, DIO x 8
GENE-BT05-A10-0010	Intel® Celeron® J1900	Fanless	CRT + LVDS	24bit, 2CH	SATA x 1 mSATA x 1 (Half Size)	Gbe x 2	USB 3.0 x 1, UBS2.0 x 3	2	2	Mini Card x 1 (Full-Size)	+12V, AT/ATX	0°C ~ 60°C	DIO x 8
GENE-BT05W2-A10-0006	Intel® Atom™ E3845	Fanless	CRT + LVDS	24bit, 2CH	SATA x 1 mSATA x 1 (Half Size)	Gbe x 2	USB 3.0 x 1, UBS2.0 x 3	2	2	Mini Card x 1 (Full-Size)	+12V, AT/ATX	WTAS 2(-40°C~85°C)	DIO x 8
GENE-BT05W2-A10-0008	Intel® Atom™ E3825	Fanless	CRT + LVDS	24bit, 2CH	SATA x 1 mSATA x 1 (Half Size)	Gbe x 2	USB 3.0 x 1, UBS2.0 x 3	2	2	Mini Card x 1 (Full-Size)	+12V, AT/ATX	WTAS 2(-40°C~85°C)	DIO x 8