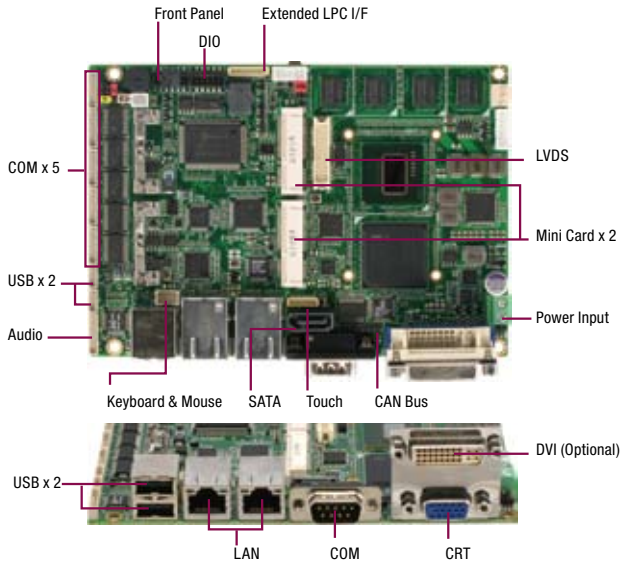
GENE-TC05

3.5” SubCompact Board with Intel® Atom™ E680/E620/E620T Processor



Features

- Intel® Atom™ E680/E620/E620T Processor
- Intel® EG20T PCH
- Onboard DDR2 667/800 Memory, 1GB
- Gigabit Ethernet x 2
- VGA or DVI (Optional), 24-bit Single Channel LVDS LCD
- 2CH HD Audio
- SATA 3.0Gb/s x 1, CFast™ x 1
- CAN Bus x 1, USB2.0 x 4, COM x 6, 8-bit Digital I/O
- Onboard 4/5/8-wire Resistive Touch Screen Controller
- Mini Card x 2
- +12V Only Operation

Specifications

System	
Form Factor	3.5"
Processor	Intel® Atom™ E680 1.6GHz/ E620 600MHz/ E620T 600MHz
System Memory	Onboard DDR2 667/800 Memory, 1GB
Chipset	Intel® EG20T PCH
I/O Chipset	Nuvoton W82627DHG-P, Fintek F81216DG
Ethernet	Realtek RTL8211CL & Intel® 82574L, 10/100/1000Base-TX, RJ-45 x 2
BIOS	AMI BIOS - 2MB SPI Flash
Wake on LAN	Yes
Watchdog Timer	Generates a time-out system reset
H/W Status Monitoring	Supports power supply voltages and temperature monitoring
Expansion Interface	Mini Card x 2 (with one SIM slot), LPC
Battery	Lithium battery
Power Requirement	+12V
Power Consumption (Typical)	Intel® Atom™ E680, DDR2 1GB 0.78A@+12V
Board Size	5.75" x 4" (146mm x 101.6mm)
Gross Weight	0.4kg
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C), -40°F ~ 185°F (-40°C ~ 85°C) for WiTAS 2
Storage Temperature	-40°F ~ 185°F (-40°C ~ 85°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	67,000
Display	Supports CRT/LCD, DVI/LCD (optional) simultaneous/ dual view displays
Chipset	Intel® Atom™ E680/E620/E620T integrated
Memory	Shared system memory up to 512MB
Resolutions	Up to 1280x1024 for CRT, DVI Up to 1280x768 for LCD
LCD Interface	Up to 24-bit single channel LVDS
I/O	
Storage	SATA 3.0Gb/s x 1, CFast™ x 1
Serial Port	RS-232 x 5, RS-232/422/485(auto flow) x 1
CAN Bus	Supports CAN Protocol Version 2.0B, bit rate up to 1M-bit/sec.
USB	USB2.0 x 4
PS/2 Port	Keyboard x 1, Mouse x 1
Touch Screen	Support 4/5/8-wire Resistive Touch Screen
Digital I/O	Supports 8-bit (Programmable)
Audio	Line-in, Line-out, Mic-in

Packing List

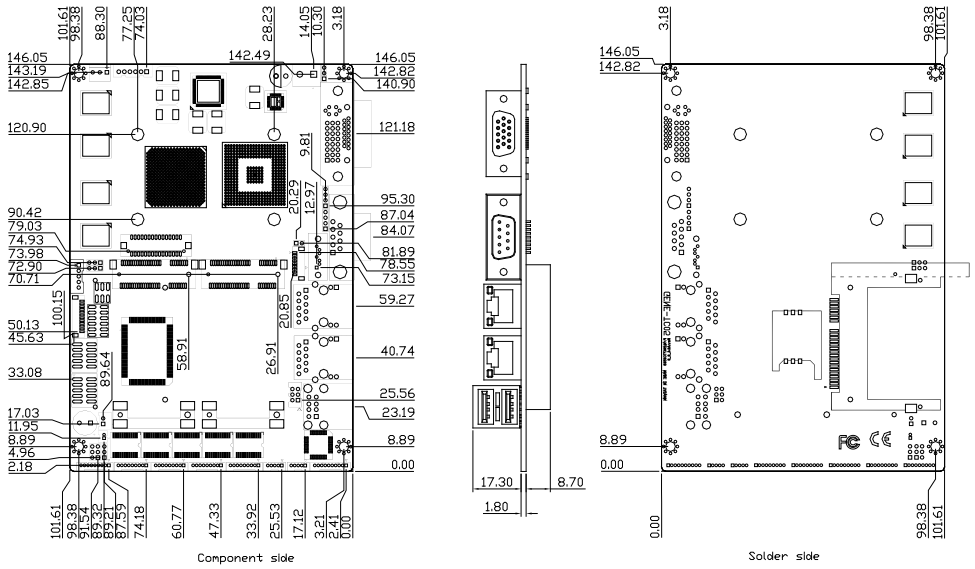
- Product CD
- GENE-TC05 With Passive Heatsink

Note: All specifications are subject to change without notice.

GENE-TC05

Dimension

Unit: mm



Ordering Information

Part Number	CPU	Fan/Fanless	Display	LVDS	Storage	LAN	USB	RS-232	RS-232/422/485	CAN BUS	Expansion Slot	Power	Temp
TF-GENE-TC05-A10	Intel® Atom™ E680	Fanless	CRT + LVDS	18/24b, 1CH	SATA x 1 CFast™ x 1	GbE x 2	4	5	1	1	Mini Card x 2	+12V/ AT/ATX	0°C ~ 60°C
TF-GENE-TC05-A10-01	Intel® Atom™ E620T	Fanless	CRT + LVDS	18/24b, 1CH	SATA x 1 CFast™ x 1	GbE x 2	4	5	1	1	Mini Card x 2	+12V/ AT/ATX	0°C ~ 60°C
TF-GENE-TC05W2-A10-01	Intel® Atom™ E620T	Fanless	CRT + LVDS	18/24b, 1CH	SATA x 1 CFast™ x 1	GbE x 2	4	5	1	1	Mini Card x 2	+12V/ AT/ATX	WiTAS2 (-40°C ~ 85°C)

Optional Accessories

- **1700050207**
  USB Cable, Length 20cm
- **1701090150**
  COM Port Cable, Length 15cm
- **1709100254**
  Audio Cable, Length 25cm
- **1702150155**
  Power Cable for 2.5" SATA Hard Disk, Length 15cm
- **1702002010**
  Big Single Row 4-pin Power Input Cable for +12V Input, Length 10cm
- **1709070500**
  SATA Cable, Length 50cm
- **1700060157**
  Keyboard/Mouse Cable