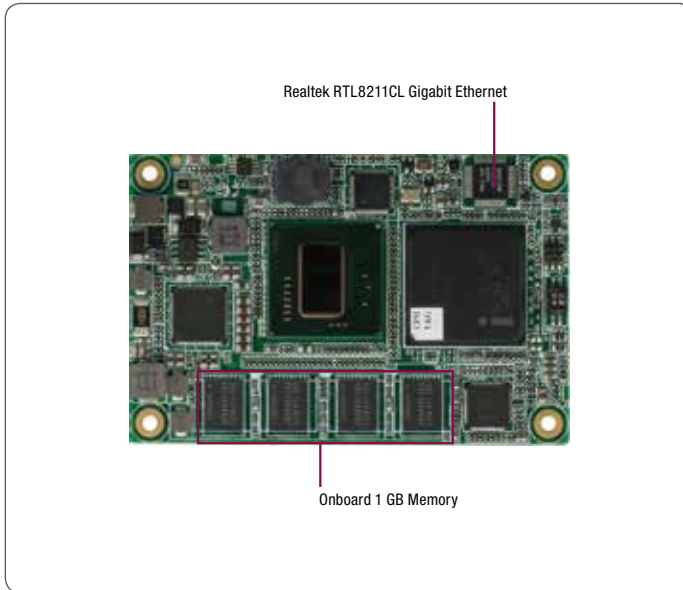


NanoCOM-TC

COM Express Type 10 CPU Module with Onboard Intel® Atom™ E620/E680/E620T/E680T Processor



Features

- Onboard Intel® Atom™ E620/E680/E620T/E680T Processor
- Intel® EG20T IOH
- Onboard DDR2 667 MHz Memory Chip, Up to 2 GB(Optional)
- Gigabit Ethernet
- Up to 24-bit LVDS LCD
- High Definition Audio Interface
- SATA SSD (4G) x 1, SATA 3.0 Gb/s x 1
- USB2.0 x 7 (USB Host x 6, USB Client x 1)
- PCI-Express [x1] x 3
- Wide DC Input Range, +4.75V to +14.7V (Optional)
- COM Express Pin-out Type 10
- Nano Module Size, 84mm x 55mm, COM.0 Rev. 2.0
- -40°C ~ 85°C Wide Temperature Range Available for Selected Model

Specifications

System	
Form Factor	COM Express Nano Module, Pin-out Type 10, COM.0 Rev. 2.0
Processor	Onboard Intel® Atom™ E620/E680/E620T/E680T Processor, up to 1.6 GHz
System Memory	Onboard DDR2 667/800 MHz memory chip, up to 2 GB
Chipset	Intel® EG20T IOH
Ethernet	Realtek RTL8211CL, 10/100/1000Base-TX
TPM	—
BIOS	AMI BIOS SPI type, 2 MB ROM
EEPROM	Atmel® AT24C02, save BIOS and Configuration data (Optional)
Wake on LAN	Yes
Watchdog Timer	Intel® E620/E680 Processor integrated
H/W Status Monitoring	Supports CPU temperature monitoring
Expansion Interface	4-bit SDIO: Multiplexed with GPIO pins PCI-Express [x1] x 3 LPC bus x 1 SMBUS x 1
Power Requirement	Wide DC input range, +4.75V to +14.7V (Optional) Nominal: +12V
Power Consumption (Typical)	Intel® Atom™ E680 1.6 GHz, DDR2 800 1 GB 0.76A@+12V
Board Size	3.31"(L) x 2.17"(W) (84mm x 55mm)
Gross Weight	0.44 lb (0.2 kg)
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 ~ 176°F (-40°C ~ 80°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	131,000
Display	
Chipset	Intel® E620/E680/E620T/E680T Processor integrated
Memory	Shared system memory up to 384 MB/ DVMT 4.0
Resolutions	Up to 1280 x 1024@ 85 Hz for SDVO Up to 1280 x 768 @60 Hz for LCD LVDS Default: 800 x 600 @18-bit
LCD Interface	24-bit Single Channel LVDS
SDVO	Supports SDVO x 1
I/O	
Storage	SATA SSD onboard (Master device), Max. 4 GB SATA 3.0 Gb/s x 1
USB	USB2.0 x 7 (USB Host x 6, USB Client x 1)
Audio	High definition audio
GPIO	Up to 4 in and 4 out



Packing List

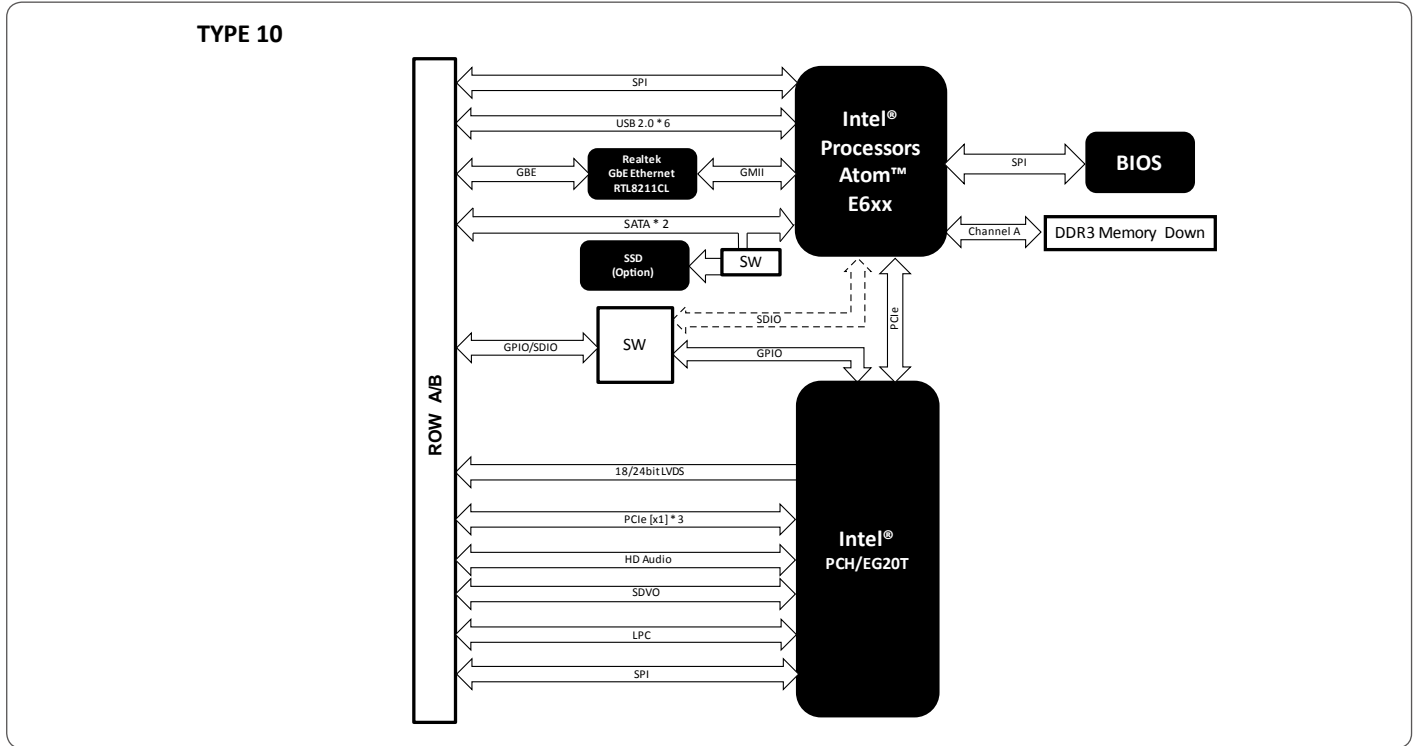
- M2.5 Screw x 4
- Product CD
- NanoCOM-TC

Optional Accessories

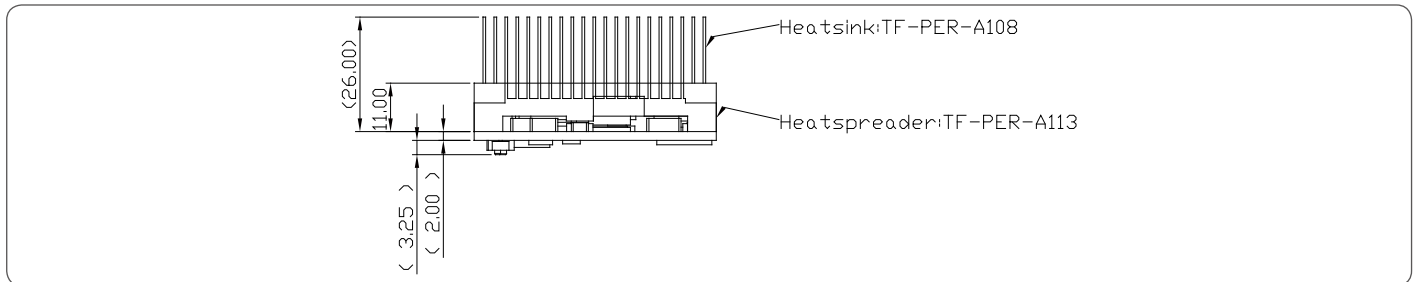
- **TF-ECB-920-A10**
COMe Type 1/6/10 Carrier Board, ATX, GbE, 8 USB, 2 COM, 4 SATA, PCIe, AT/ATX, Legacy Free, Rev. A1.0
- **TF-PER-A108**
Passive Heatsink, For NanoCOM-TC, Onboard CPU
- **TF-PER-A113**
Heat Spreader Kit, For NanoCOM-TC, Onboard CPU

NanoCOM-TC

Block Diagram Unit: mm



Dimension Unit: mm



Ordering Information

Part Number	COM Express Type	CPU	Memory	Display	LVDS	Storage	LAN	USB	UART	Expansion Slot	Power	Temp
TF-NanoCOM-TC-A10	10 (COM.0 Rev.2.0)	Intel® Atom™ E620/ 0.6 GHz	Onboard 1 GB DDR2	LVDS, SDVO	24b, 1CH	SATA2 x 1	GbE x 1	USB2.0 x 6 USB (Client) x 1	—	PCI-E [x1] x 3	12V	0°C ~ 60°C
TF-NanoCOM-TCW2-A10	10 (COM.0 Rev.2.0)	Intel® Atom™ E620T/ 0.6 GHz	Onboard 1 GB DDR2	LVDS, SDVO	24b, 1CH	SATA2 x 1	GbE x 1	USB2.0 x 6 USB (Client) x 1	—	PCI-E [x1] x 3	12V	WITAS 2 -40°C ~ 85°C
TF-NanoCOM-TC-A10-03	10 (COM.0 Rev.2.0)	Intel® Atom™ E680/ 1.6 GHz	Onboard 1 GB DDR2	LVDS, SDVO	24b, 1CH	SATA2 x 1	GbE x 1	USB2.0 x 6 USB (Client) x 1	—	PCI-E [x1] x 3	12V	0°C ~ 60°C
TF-NanoCOM-TCW2-A10-03	10 (COM.0 Rev.2.0)	Intel® Atom™ E680T/ 1.6 GHz	Onboard 1 GB DDR2	LVDS, SDVO	24b, 1CH	SATA2 x 1	GbE x 1	USB2.0 x 6 USB (Client) x 1	—	PCI-E [x1] x 3	12V	WITAS 2 -40°C ~ 85°C