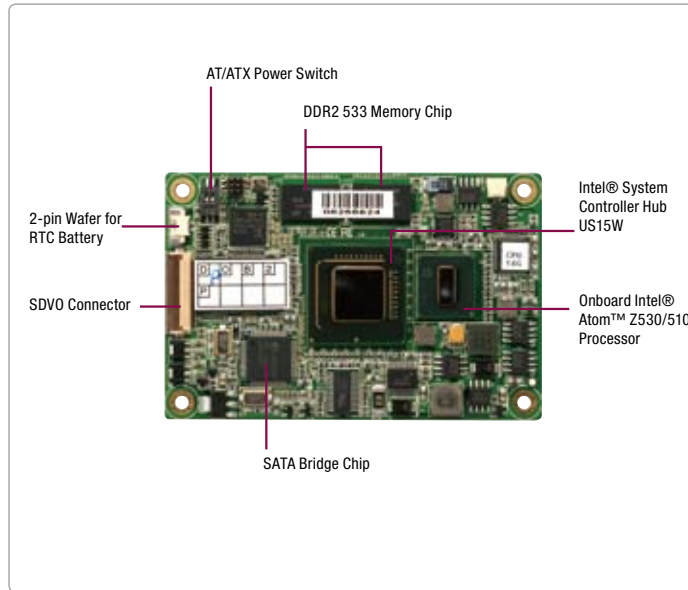


# NanoCOM-U15 A1.0

COM Express CPU Module With Onboard Intel® Atom™ Z530/Z510 Processor



## Features

- Onboard Intel® Atom™ Z530/Z510 Processor
- Intel® System Controller Hub US15W
- Onboard DDR2 533 Memory Chip, Max. 1 GB
- Gigabit Ethernet
- Up To 24-bit LVDS LCD, SDVO Connector x 1
- High Definition Audio Interface
- PATA SSD (Up To 4 GB) x 1, SATA 3.0Gb/s x 1
- USB2.0 x 8
- PCI-Express [x1] x 1
- Wide DC Input Range, +4.75V To +14.7V (Optional)
- COM Express Pin-out Type 1
- Nano Module Size, 84mm x 55mm, COM.0 Rev. 1.0

## Specifications

System	
Form Factor	COM Express Nano Module, Pin-out Type 1, COM.0 Rev. 1.0
Processor	Onboard Intel® Atom™ Z530/Z510 processor Z530: 1.6 GHz/FSB 533 MHz Z510: 1.1 GHz/FSB 400 MHz
System Memory	Onboard DDR2 533 memory chip, Max. 1 GB (512 MB is recommended)
Chipset	Intel® System Controller Hub US15W
I/O Chipset	Intel® System Controller Hub US15W
Ethernet	Intel® 82574L, 10/100/1000Base-TX
BIOS	Award BIOS v8.0 TSOP type, 1 MB ROM With legacy-free BIOS (Default)
EEPROM	Atmel® AT24C02, save BIOS and configuration data (Optional)
Wake on LAN	—
Watchdog Timer	Fintek F75111
H/W Status Monitoring	Supports CPU temperature monitoring (Optional)
Expansion Interface	4-bit SDIO: Multiplexed with GPIO pins PCI-Express [x1] x 1 LPC bus x 1 SMBus x 1
Power Requirement	Wide DC input range, +4.75V to +14.7V (Optional) Nominal: +12V 2-pin wafer for RTC battery
Power Consumption (Typical)	Intel® Atom™ Z530 1.6 GHz, DDR2 533 512 MB 0.58A @ +12V 0.03A @ +5V (W/ ECB-951D)
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)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	75,000
Display	
Chipset	Intel® System Controller Hub US15W integrated
Memory	Shared system memory up to 256 MB
Resolutions	Up to 1366 x 768 @ 85 Hz (Max. pixel clock of 112 MHz) for LVDS Up to 1280 x 1024 @ 85 Hz (Max. Pixel clock of 160 MHz) for SDVO
LCD Interface	Up to 24-bit single channel LVDS
SDVO	SDVO connector x 1
I/O	
Storage	PATA SSD onboard (Master device), Max. 4 GB SATA 3.0Gb/s x 1
USB	USB2.0 x 8
Audio	High definition audio
GPIO	Up to 4 in or 4 out: Multiplexed with 4-bit SDIO



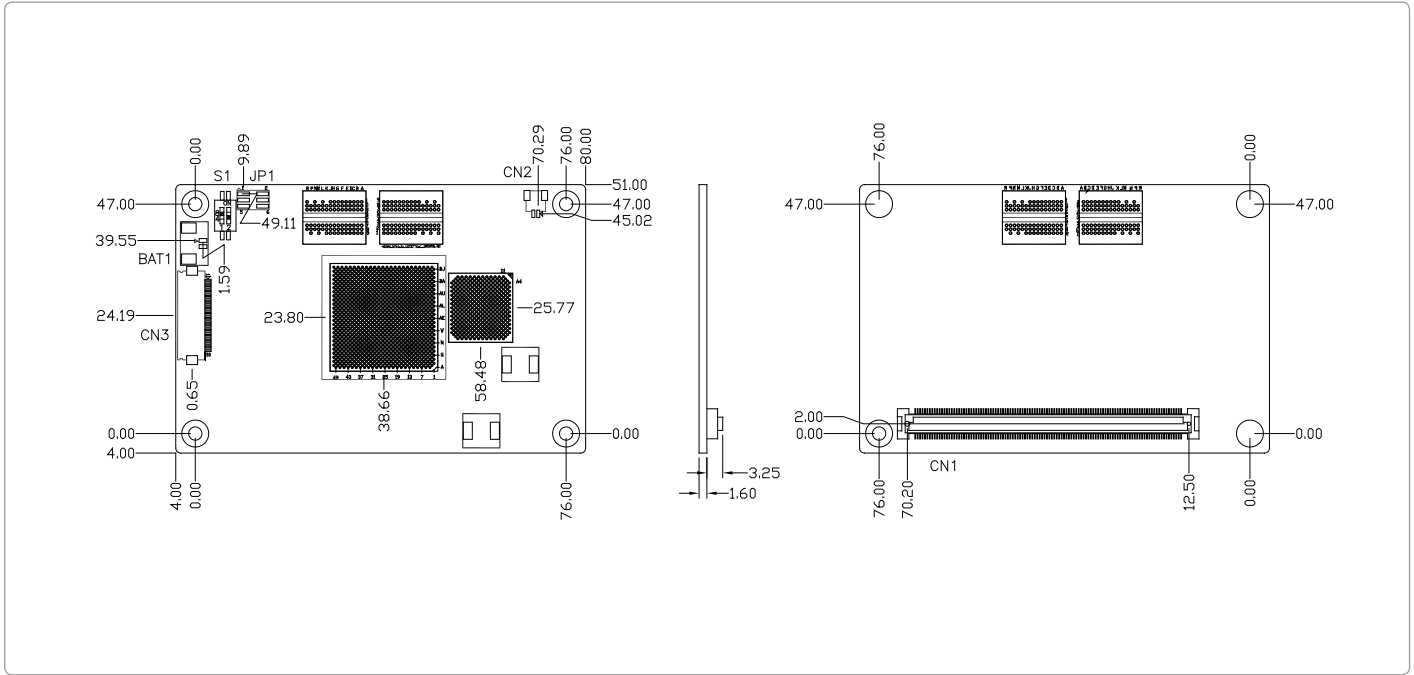
## Packing List

- M2.5 Screw x 4
- Product CD
- NanoCOM-U15 A1.0

# NanoCOM-U15 A1.0

## Dimension

Unit: mm



## Ordering Information

Part Number	COM Express Type	CPU	Memory	Display	LVDS	Storage	LAN	USB	URAT	Expansion Slot	Power	Temp
TF-NanoCOM-U15-A10	1 (COM.0 Rev.1.0)	Intel® Atom™ Z510/1.1G	Onboard 512MB DDR2	LVDS, SDVO	24-bit Single Channel	SATA2 x 1	GbE x 1	USB2.0 x 8	—	PCI-E[1] x 2	4.75~14V	0°C ~ 60°C
TF-NanoCOM-U15-A10-02	1 (COM.0 Rev.1.0)	Intel® Atom™ Z530/1.6G	Onboard 512MB DDR2	LVDS, SDVO	24-bit Single Channel	SATA2 x 1	GbE x 1	USB2.0 x 8	—	PCI-E[1] x 2	4.75~14V	0°C ~ 60°C

## Optional Accessories

- TF-ECB-951D-A10-03**  
 COM Express Carrier Board, Gigabit Ethernet, 2CH Audio, 2 COM, USB2.0, CompactFlash™, SD, PCI-Express, DC, 1 COM Express Connector, Rev. A1.0
- TF-PER-A063**  
 Passive Heatsink, For NanoCOM-U15, Onboard CPU
- TF-PER-A064**  
 Heat Spreader Kit, For NanoCOM-U15, Onboard CPU