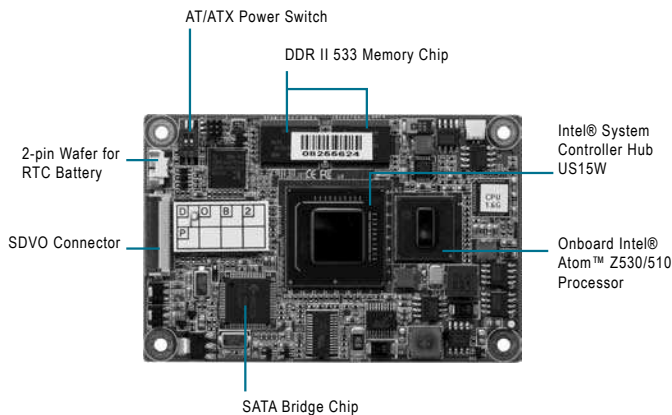


NanoCOM-U15

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

06

COM Express CPU Modules



Features

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



Specifications

System	
Form Factor	COM Express nano module, Pin-out Type I
Processor	Onboard Intel® Atom™ Z530/Z510 processor Z530: 1.6GHz/FSB 533MHz Z510: 1.1GHz/FSB 400MHz
System Memory	Onboard DDRII 533 memory chip, Max. 1GB
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, 1MB ROM With legacy-free BIOS (Default)
EEPROM	Atmel® AT24C02, save BIOS and configuration data (Optional)
Wake on LAN	N/A
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 2-pin wafer for RTC battery
Power Consumption (Typical)	Intel® Atom™ Z530 1.6GHz, DDRII 533 512MB 0.58A @ +12V 0.03A @ +5V
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	
Supports LCD/DVI or LCD/LCD (via SDVO) simultaneous/ dual view displays	
Chipset	Intel® System Controller Hub US15W integrated
Memory	Shared system memory up to 256MB
Resolutions	Up to 1366 x 768 @ 85Hz (Max. pixel clock of 112 MHz) for LVDS Up to 1280 x 1024 @ 85Hz (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	1. PATA SSD on board (Master device), Max. 4GB (TBD) 2. SATA II x 1
USB	USB 2.0 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
- Utility CD
- NanoCOM-U15

Ordering Information

- **TF-NanoCOM-U15-A10**
NanoCOM Express CPU Module, Intel® Atom™ Z510, US15W, DDRII 512MB, Gigabit Ethernet, SATA, USB 2.0, Rev. A1.0
- **TF-NanoCOM-U15-A10-02**
NanoCOM Express CPU Module, Intel® Atom™ Z530, US15W, DDRII 512MB, Gigabit Ethernet, SATA, USB 2.0, Rev. A1.0

Optional Accessories

- **TF-ECB-951D-A10-01**
COM Express Carrier Board, Gigabit Ethernet, 2CH Audio, 2COM, USB 2.0, CompactFlash™, SD, PCI-Express, DC, 1 COM Express Connector, Rev. A1.0
- **TF-PER-A063**
Passive Heat-sink, For NanoCOM-U15, On-board CPU
- **TF-PER-A064**
Heat Spreader Kit, For NanoCOM-U15, On-board CPU
- **14S62U1500**
8Mb PLCC BIOS Chip with Standard (Legacy) BIOS for COM-U15/ NanoCOM-U15 + ECB-951D