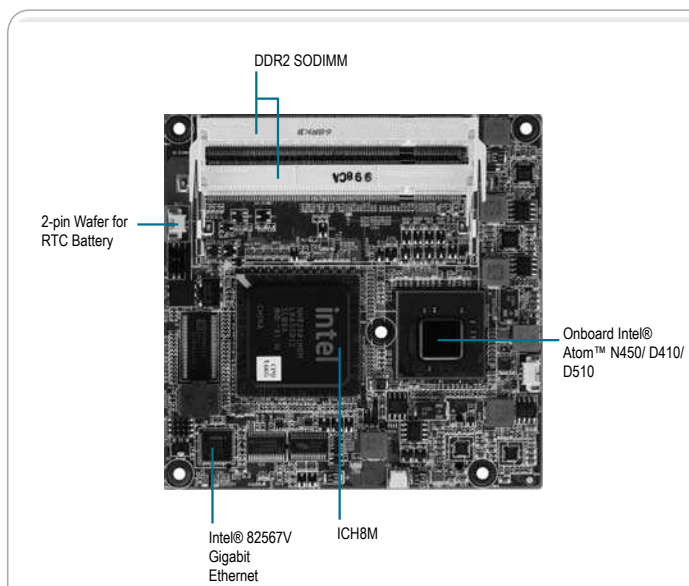


## COM Express CPU Module With Onboard Intel® Atom™ N450/ D410/ D510 Processor



## Features

- Onboard Intel® Atom™ N450/ D410/ D510 Processor
- Intel® ICH8M
- SODIMM DDR2 533/667/800 Memory, Max. 4 GB
- Gigabit Ethernet
- CRT, 18-bit Single-channel LVDS LCD
- High Definition Audio Interface
- PATA x 1, SATA II x 3
- USB2.0 x 8
- PCI x 4, PCI-Express[x1] x 5 (x 6: Optional)
- Wide DC Input Range, +8.5V To +19V (Optional)
- COM Express Pin-out Type II
- Compact Module Size, 95mm x 95mm



## Specifications

System	
Form Factor	COM Express compact module, Pin-out Type II
Processor	Onboard Intel® Atom™ N450/ D410/ D510 processor, 1.66 GHz
System Memory	200-pin DDR2 SODIMM x 2 TF-COM-LN-A10: Max. 2 GB (DDR2 533/667) TF-COM-LN-A10-01/-02: Max. 4 GB (DDR2 667/800)
I/O Chipset	ICH8M
Ethernet	Intel® 82567V, 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	Fintek F75111
H/W Status Monitoring	Supports CPU temperature monitoring
Expansion Interface	PCI-Express[x1] x 5 (x 6: Optional, GbE on the module: Disabled) 32-bit PCI x 4 LPC bus x 1 SMBus x 1 I2C x 1
Power Requirement	Wide DC input range, +8.5V to +19V (Optional) Nominal: +12V 2-pin wafer for RTC battery
Power Consumption (Typical)	Intel® Atom™ D510 1.66 GHz, DDR2 667 2GB 1.08A @ +12V 0.74A @ +5V w/ ECB-916M
Board Size	3.74" (L) x 3.74" (W) (95mm x 95mm)
Gross Weight	0.55 lb (0.25 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)	90,000
Display	
	Supports CRT/LCD simultaneous/ dual view displays
Chipset	Intel® N450/ D410/ D510 integrated Integrates hardware MPEG2 decoder
Memory	Shared system memory up to 384 MB/ DVMT 4.0
Resolutions	Up to 2048 x 1536 (QXGA) @ 60 Hz for CRT (D410/D510) Up to 1400 x 1050 (SXGA) @ 60 Hz for CRT (N450) Up to 1366 x 768 or 1280 x 800 (WXGA) for LCD
LCD Interface	18-bit single-channel LVDS
I/O	
Storage	PATA x 1 (Two devices) SATA II x 3
USB	USB 2.0 x 8
Audio	High definition audio
GPIO	Up to 4 in or 4 out

## Packing List

- M2.5 Screw x 4
- Utility CD
- COM-LN

## Ordering Information

- **TF-COM-LN-A10**  
COM Express CPU Module Onboard Intel® Atom™, N450, Dual DDR2, Gigabit Ethernet, SATA, USB2.0, Rev.A1.0
- **TF-COM-LN-A10-01**  
COM Express CPU Module Onboard Intel® Atom™, D510, Dual DDR2, Gigabit Ethernet, SATA, USB2.0, Rev.A1.0
- **TF-COM-LN-A10-02**  
COM Express CPU Module Onboard Intel® Atom™, D410, Dual DDR2, Gigabit Ethernet, SATA, USB2.0, Rev.A1.0

## Optional Accessories

- **TF-ECB-916M-A21**  
COM Express Carrier Board, microATX, 2 Gigabit Ethernet, 7.1CH Audio, 2COM (Winbond), USB, PCI-Express, AT/ATX, Rev.A2.1
- **TF-PER-A083**  
CPU Cooler, For COM-LN, Onboard CPU, 12V Fan
- **TF-PER-A084**  
Passive Heatsink, For COM-LN, Onboard CPU
- **TF-PER-A085**  
Heat Spreader Kit, For COM-LN, Onboard CPU