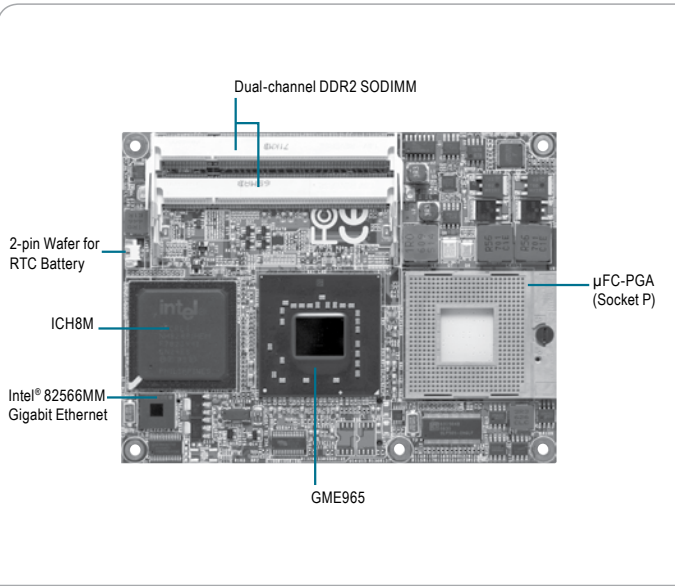


# COM-965

COM Express CPU Module with Intel® Core™ 2 Duo/ Celeron® M (Socket-P Based) Processors

07

COM Express CPU Modules



## Features

- Intel® Core™ 2 Duo/ Celeron® M (Socket-P Based) Processors
- Intel® GME965 + ICH8M
- Dual-channel DDR2 SODIMM 533/667 Memory, Max. 4 GB
- Gigabit Ethernet
- CRT, Up To 24-bit Dual-channel LVDS LCD, SDVO
- High Definition Audio Interface
- PATA x 1, SATA 3.0Gb/s x 3
- USB2.0 x 8
- PCI x 4, PCI-Express [x16] x 1, PCI-Express [x1] x 5
- Wide DC Input Range, +8.5V To +19V (Optional)
- COM Express Basic Module Pin-out Type 2, COM.0 Rev. 1.0



## Specifications

System	
Form Factor	COM Express basic module, Pin-out Type 2, COM.0 Rev. 1.0
Processor	Intel® Core™ 2 Duo/ Celeron® M (Socket-P based) processors
System Memory	200-pin DDR2 SODIMM x 2, Max. 4 GB (DDR2 533/667), supports dual-channel function
Chipset	Intel® GME965 + ICH8M
I/O Chipset	ICH8M
Ethernet	Intel® 82566MM, 10/100/1000Base-TX
TPM	v1.2, Infineon SLB9635TT1.2
BIOS	Award BIOS v6.0 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 [x16] x 1 (Shared with 2 SDVO ports) PCI-Express [x1] x 5 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® T7500 2.2GHz, DDR2 667 1 GB 3.7A @ +12V, 0.8A @ +5V (w/ECB-916M)
Board Size	4.92"(L) x 3.74"(W) (125mm x 95mm)
Gross Weight	0.66 lb (0.3 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)	100,000
Display	Supports CRT/LCD simultaneous/ dual view displays
Chipset	Intel® GME965 integrated
Memory	Shared system memory up to 384 MB/ DVM T 4.0
Resolution	Up to 2048 x 1536 (QXGA) @ 60 Hz for CRT Up to 2048 x 1536 (QXGA) for LCD
LCD Interface	Up to 24-bit dual-channel LVDS
SDVO/ DVO/ Side Port	Supports SDVO x 2 (Shared with PCI-Express [x16])
I/O	
Storage	PATA x 1 (Two devices), SATA 3.0Gb/s x 3
USB	USB2.0 x 8
Audio	High definition audio
GPIO	Up to 4 in or 4 out

For Wide Temperature series of this model, please refer to Chapter 1 - Wide Temperature Boards, to get detailed specification of COM-965W1.

## Packing list

- M2.5 Screw x 5
- Product CD
- COM-965

## Ordering Information

- **TF-COM-965-A10**  
COM Express CPU Module, Socket P, Dual DDR2, Gigabit Ethernet, USB2.0, Rev. A1.0
- **TF-COM-965-A10-01**  
COM Express CPU Module, Socket P, Dual DDR2, Gigabit Ethernet, USB2.0, TPM, Rev. A1.0

## Optional Accessories

- **TF-ECB-916M-A10-01**  
COM Express Carrier Board, microATX, Dual Gigabit Ethernet, 7.1CH Audio, 4 COM, USB, PCI-Express, AT/ATX, Rev. A1.0
- **TF-PER-A051**  
CPU Cooler, For COM-965/COM-45SP, Socket-type CPU, 12V Fan
- **TF-PER-A052**  
CPU Cooler, For COM-965/COM-45SP, Onboard CPU, 12V Fan
- **TF-PER-A082**  
Passive Heat-sink, For COM-965/COM-45SP, Socket-type CPU
- **TF-PER-A067**  
Passive Heat-sink, For COM-965/COM-45SP, Onboard CPU
- **TF-PER-A072**  
Heat Spreader Kit, For COM-965/COM-45SP, Socket-type CPU
- **TF-PER-A066**  
Heat Spreader Kit, For COM-965/COM-45SP, Onboard CPU