

## Specifications

System	
Form Factor	COM Express basic module, Pin-out Type 2 COM.0 Rev. 1.0
Processor	Onboard Intel® Core™ 2 Duo/ Celeron® M (SFF, 22 x 22 mm) processor
System Memory	204-pin DDR3 SODIMM x 2, Max. 8 GB (DDR3 800/1066), supports dual-channel function
Chipset	Intel®GS45 + ICH9M SFF
I/O Chipset	ICH9M SFF
Ethernet	Intel® 82567LM, 10/100/1000Base-TX
TPM	v1.2
BIOS	AWARD BIOS v8.0 SPI type, 2 MB ROM With legacy-free BIOS (Default)
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 SDVOs/ 3 DisplayPorts/ 2 HDMI/ 2 DVIs) => Can be configured as PCI-Express [x1]/ [x2]/ [x4]/ [x8] 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® SP9300 2.26 GHz, DDR3 1066 4 GB 3A @ +12V, 0.81A @ +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), -4°F ~ 158°F (-20°C ~ 70°C) for WiTAS 1
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	85,000
Display	
Chipset	Intel® GS45 integrated Integrates hardware MPEG2 decoder Supports WMV9 (VC-1) and H.264 (AVC)
Memory	Shared system memory up to 512 MB/ DVMT 5.0
Resolution	Up to 2048 x 1536 (QXGA) for CRT Up to 1920 x 1200 (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])
HDMI	Supports HDMI x 2 (Shared with PCI-Express [x16], needs to add a level shifter)
DVI	Supports DVI x 2 (Shared with PCI-Express [x16], needs to add a level shifter)
DisplayPort	Supports DisplayPort™ x 3 (Shared with PCI-Express [x16])

## Features

- Onboard Intel® Core™ 2 Duo/ Celeron® M Processor
- Intel® GS45 + ICH9M SFF
- Dual-Channel SODIMM DDR3 800/1066 Memory, Max. 8 GB
- Gigabit Ethernet
- CRT, Up To 24-bit Dual-Channel LVDS LCD, DisplayPort™, HDMI, DVI, 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



I/O	
Storage	PATA x 1 (One device) SATA 3.0Gb/s x 3
USB	USB2.0 x 8
Audio	High definition audio
GPIO	Up to 4 in or 4 out

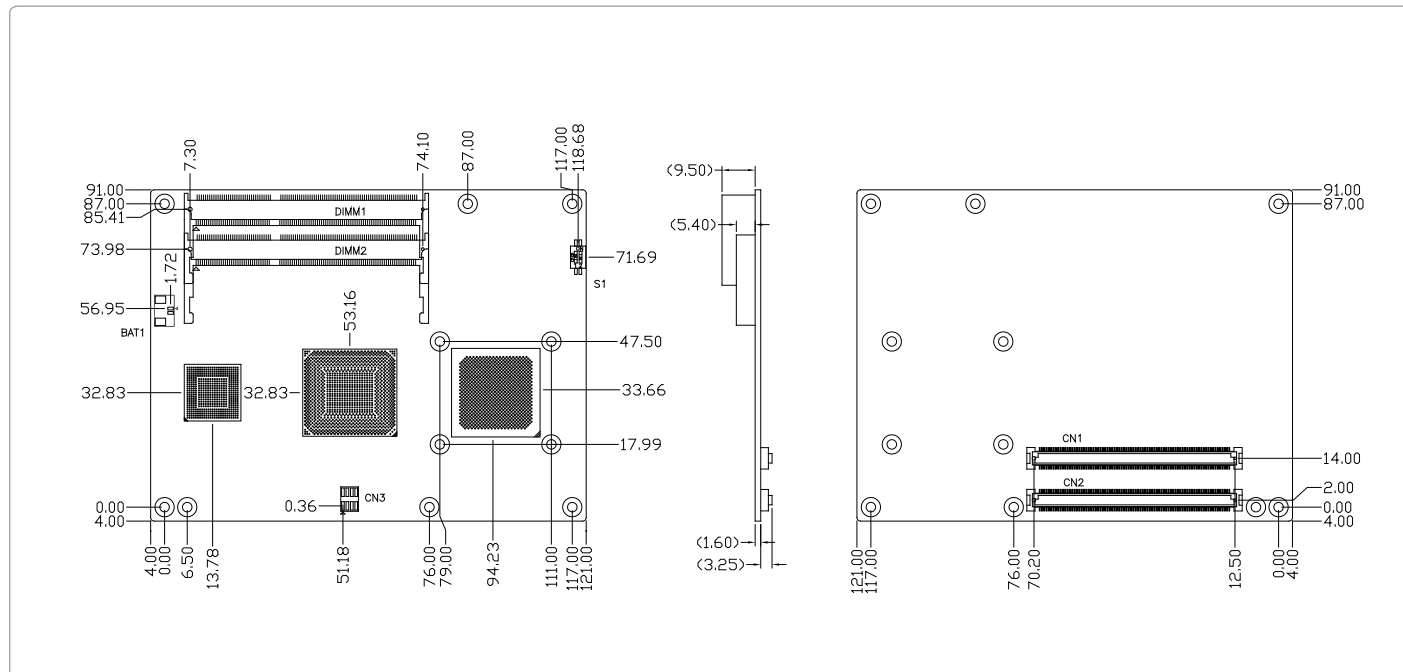
## Packing List

- M2.5 Screw x 5
- Product CD
- COM-45GS

# COM-45GS

## Dimension

Unit: mm



## Ordering Information

Part Number	COM Express Type	CPU	Memory	Display	LVDS	Storage	LAN	USB	URAT	Expansion Slot	Power	Temp
TF-COM-45GS-A10	2 (COM.0 Rev.1.0)	Intel® Core™2 Duo SL9400/1.86G, 17W	DDR3 SODIMM x 2 Max.8GB	CRT, LVDS, SDVO, HDMI, DP, DVI	24-bit dual channel	SATA2 x 3 PATA x 1	GbE x 1	USB2.0 x 8	—	PCI-E [x16] x 1 PCI-E [x1] x 5 32-bit PCI x 4	12V	0°C ~ 60°C
TF-COM-45GSW1-A10	2 (COM.0 Rev.1.0)	Intel® Core™2 Duo SL9400/1.86G, 17W	DDR3 SODIMM x 2 Max.8G	CRT, LVDS, SDVO, HDMI, DP, DVI	24-bit dual channel	SATA2 x 3 PATA x 1	GbE x 1	USB2.0 x 8	—	PCI-E [x16] x 1 PCI-E [x1] x 5 32-bit PCI x 4	12V	WITAS 1 (-20°C ~ 70°C)
TF-COM-45GS-A10-01	2 (COM.0 Rev.1.0)	Intel® Core™2 Duo SU9300/1.2G, 10W	DDR3 SODIMM x 2 Max.8GB	CRT, LVDS, SDVO, HDMI, DP, DVI	24-bit dual channel	SATA2 x 3 PATA x 1	GbE x 1	USB2.0 x 8	—	PCI-E [x16] x 1 PCI-E [x1] x 5 32-bit PCI x 4	12V	0°C ~ 60°C
TF-COM-45GSW1-A10-01	2 (COM.0 Rev.1.0)	Intel® Core™2 Duo SU9300/1.2G, 10W	DDR3 SODIMM x 2 Max.8GB	CRT, LVDS, SDVO, HDMI, DP, DVI	24-bit dual channel	SATA2 x 3 PATA x 1	GbE x 1	USB2.0 x 8	—	PCI-Express [x16] x1 PCI-Express [x1] x5 32-bit PCI x 4	12V	WITAS 1 (-20°C ~ 70°C)
TF-COM-45GS-A10-02	2 (COM.0 Rev.1.0)	Intel® Celeron® M ULV 723/1.2G, 10W	DDR3 SODIMM x 2 Max.8GB	CRT, LVDS, SDVO, HDMI, DP, DVI	24-bit dual channel	SATA2 x 3 PATA x 1	GbE x 1	USB2.0 x 8	—	PCI-E [x16] x 1 PCI-E [x1] x 5 32-bit PCI x 4	12V	0°C ~ 60°C

## Optional Accessories

- **TF-ECB-916M-A10-01**  
COM Express Carrier Board, microATX, 2 Gigabit Ethernet, 7.1CH Audio, 4 COM, USB, PCI-Express, AT/ATX, Rev. A1.0
- **TF-PER-A073**  
CPU Cooler, For COM-45GS, Onboard CPU, 12V Fan
- **TF-PER-A074**  
Passive Heatsink, For COM-45GS, Onboard CPU
- **TF-PER-A075**  
Heat Spreader Kit, For COM-45GS, Onboard CPU