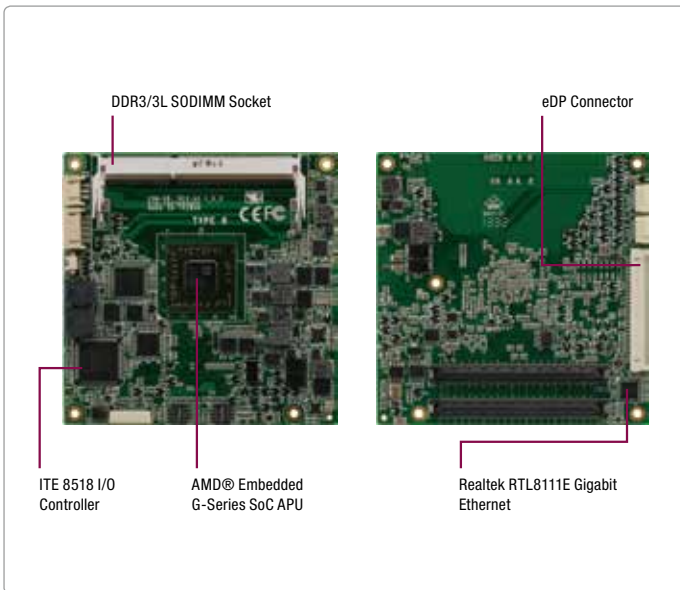


# COM-KB

COM Express Type 6 with AMD® G-Series SoC APU



## Features

- AMD® Embedded G-Series SoC APU
- AMD® GX-420CA Quad-core 2.0GHz SoC with AMD Radeon™ HD 8400E Graphics
- AMD® GX-217GA Dual-core 1.65GHz SoC with AMD Radeon™ HD 8280E Graphics
- DDR3/DDR3L-1600MHz SODIMM, Up to 16GB
- Gigabit Ethernet x 1
- CRT, 24-bit Single Channel LVDS
- High Definition Audio Interface
- SATA x 2, USB 3.0 x 2, USB 2.0 x 8
- PCI-Express [x1] x 5
- COM Express Pin out Type 6
- Compact Module Size, 95mm x 95mm, COM.0 Rev. 2.0

## Specifications

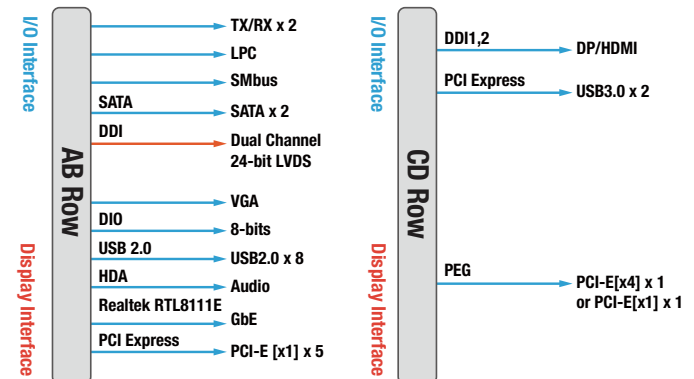
System	
Form Factor	COM Express compact module, Pin-out type 6, COM. 0 Rev.2.0
Processor	AMD® Embedded G-Series SoC APU GX-420CA SoC with AMD Radeon™ HD 8400E Graphics(Quad-core, 25W TDP, CPU freq. 2.0GHz, GPU freq. 600MHz) GX-217GA SoC with AMD Radeon™ HD 8280E Graphics (Dual-core, 15W TDP, CPU freq. 1.65GHz, GPU freq. 450MHz)
System Memory	204-pin DDR3/DDR3L 1600MHz SODIMM, Up to 16GB (non-ECC support)
Chipset	AMD® Embedded G-Series SoC
I/O Chipset	ITE 8518 I/O controller
Ethernet	Realtek RTL8111E , 10/100/1000Base-TX, RJ-45 x 1
TPM	—
BIOS	AMI Plug & Play SPI BIOS – 16MB ROM
EEPROM	Atmel AT24C02 (2Kb), Save BIOS and configuration data (Optional)
Wake on LAN	Yes
Watchdog Timer	ITE 8518 , 255 levels
H/W Status Monitoring	Supports CPU temperature monitoring
Expansion Interface	PCI-Express [x1] x5, LPC bus x 1, SMBus x 1, PCI-Express[x4] x 1(PEG) , DDI x 2
Power Requirement	+12V AT/ATX
Power Consumption	AMD GX-420CA 2.0G, DDR3L 8G, 1.2A@+12V
Board Size	3.74" x 3.74" (95mm x 95mm)
Gross Weight	0.55 lb (0.25 Kg)
Operation Temperature	32 °F ~ 140 °F (0 °C ~ 60 °C)
Storage Temperature	-4 °F ~ 158 °F (-20 °C ~ 70 °C)
Operation Humidity	10% ~ 80% relative humidity, non-condensing
MTBF	80,000
Display	
Chipset	AMD® Embedded G-Series SoC APU
Graphic Engine	GX-420CA SoC with AMD Radeon™ HD 8400E Graphics(Quad-core, 25W TDP, CPU freq. 2.0GHz, GPU freq. 600MHz) GX-217GA SoC with AMD Radeon™ HD 8280E Graphics (Dual-core, 15W TDP, CPU freq. 1.65GHz, GPU freq. 450MHz)
Resolution	1920 x 1200 @ 60Hz for CRT 1400 x 1050 @ 60Hz for LCD 1920x 1080 for HDMI 1920x 1080 for eDP
LCD Interface	24-bit single channel LVDS
SDVO	—
I/O	
Storage	SATA x 2
USB	USB3.0 x 2, USB2.0 x 8
Audio	High definition audio interface
GPIO	Up to 4 in and 4 out



## Packing List

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

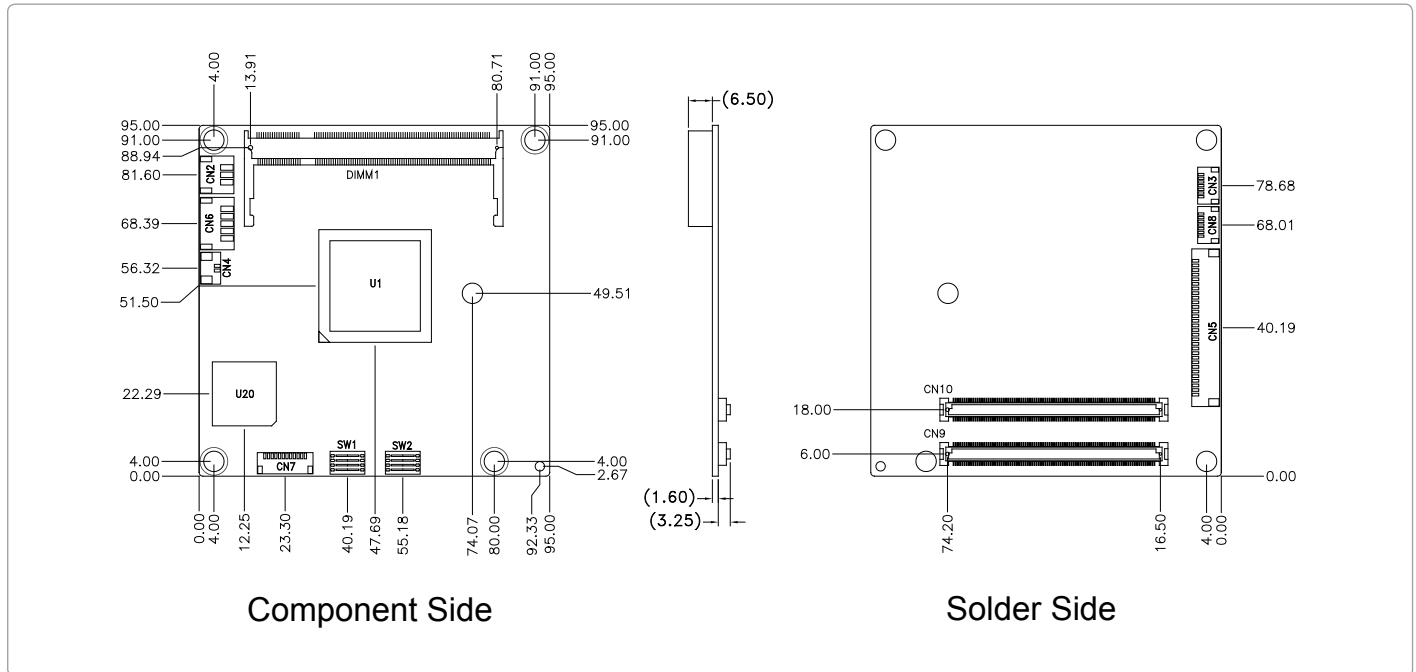
## Block Diagram



# COM-KB

## Dimension

Unit: mm



## Ordering Information

Part Number	COM Express Type	CPU	Memory	Fan/Fanless	Display	LVDS	Storage	LAN	USB	UART	Expansion Slot	Power	Temp.
COM-KB-A10-01	6 (COM.0 Rev. 2.0)	AMD GPU GX420CA-QC 2.0GHz (25W)	DDR3/DDR3L-1600 MHz, Up to 16GB	Fan	VGA, HDMI, LVDS, eDP	24b, 1CH	SATA x 2	GbE x 1	USB3.0 x 2 USB2.0 x 8	2 (Tx/Rx)	PCI-E[x1] x 5, 1PEG x 4	12V	0°C - 60°C
COM-KB-A10-02	6 (COM.0 Rev. 2.0)	AMD GPU GX217GA-DC 1.65GHz (15W)	DDR3/DDR3L-1600 MHz, Up to 16GB	Fan	VGA, HDMI, LVDS, eDP	24b, 1CH	SATA x 2	GbE x 1	USB3.0 x 2 USB2.0 x 8	2 (Tx/Rx)	PCI-E[x1] x 5, 1PEG x 4	12V	0°C - 60°C

## Optional Accessory

- ECB-920A-A10**  
 COM Express Type 1/6/10 Carrier Board, Gigabit Ethernet, USB, 2 COM, 4 SATA, PCIe, AT/ATX, Legacy Free, Rev. A1.0
- TF-PER-A127**  
 Heat Spreader, For COM-KB
- TF-PER-A118**  
 CPU Cooler, 35Watt, For COM Express Size, To be used with Heat Spreader