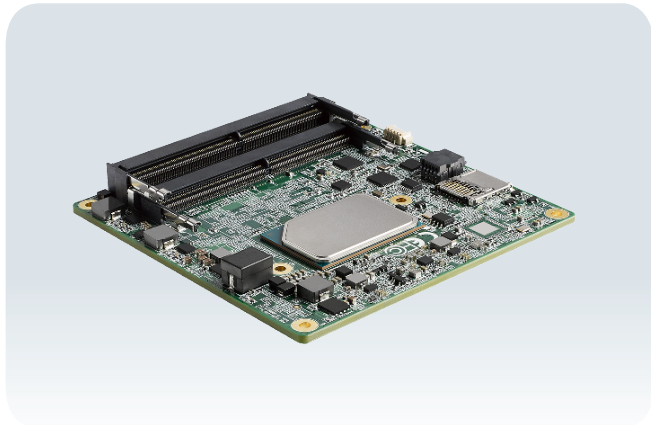


# VCOM-1600

COM Express Compact Size Type 6 Module with Intel Atom® x6000E Processor



## Features

- Intel Atom® x6000E Processor (Elkhart Lake), boost up to 3.0GHz
- Multiple DDI, VGA, LVDS display interfaces, support up to 4K resolution
- DDR4 3200MHz memory, up to 32GB
- 1 independent 2.5GigE LAN supports Intel® Time Coordinated Computing (TCC) and Time Sensitive Networking (TSN) for real-time data synchronization
- PCIe Gen3 lanes, TPM 2.0 supported
- USB 3.1 Gen 2 supports up to 10Gbps data transfer



## Specifications

System	
Processor	Intel Atom® x6000E Processor (Elkhart Lake)
BIOS	AMI
Memory	2 DDR4 3200MHz SO-DIMM, up to 32GB
OS	Windows 10, Linux
Graphics	
Graphics Processor	Intel® UHD Graphics for 10th Gen Intel® Processors
Interface	Multiple independent display : <ul style="list-style-type: none"> <li>▪ VGA : 1920 x1200 @60Hz</li> <li>▪ LVDS : 1920 1200 @60Hz</li> <li>▪ 2 DDI: 4096 x2160 @60Hz</li> </ul>
Ethernet	
LAN 1	Intel® I225IT 2.5GigE LAN
Audio	
Audio Codec	On VCOM-BASE (Realtek ALC885-VD standard support)
Audio Interface	HAD Bus
I/O Interface	
Internal I/O	<ul style="list-style-type: none"> <li>▪ 2 DDR4 SO-DIMM Socket</li> <li>▪ 1 Micro SD Socket</li> <li>▪ 1 FAN Connector</li> <li>▪ RAW AB/CD Connector</li> </ul>
Storage	
SATA	2 SATA III (6Gbps) (to RAW A/B)
Storage Device	1 Micro SD Card Socket
Power	
Power Input	ATX: 12V±5% / 5Vsb ±5%; or AT: 12V±5%
Management	ACPI 5.0 compliant, Smart Battery support
Power States	C1-C6, S0, S1, S3, S4 (Wake on USB S3, WOL S3/S4)

Expansion	
PCIe	<ul style="list-style-type: none"> <li>▪ 4 PCIe x1 (configurable to 4 x1, 2 x2, 1 x4, 2 x1+1 x2, 1 x2+2 x1, to RAW A/B)</li> <li>▪ 1 PCIe x1 (to RAW A/B)</li> <li>▪ 1 PCIe x16 (to RAW C/D)</li> </ul>
Others	
HW Monitor	Monitoring temperature, voltages. Auto throttling control when CPU overheats.
TPM	Infineon SLB9665 supports TPM 2.0, SPI Interface (Optional)
Other Function	Sleep Function, Lid Function
Mechanical	
Dimensions (L x W)	Compact size: 95mm x 95mm (3.74" x 3.74")
Form Factor	PICMG COM.0 Rev 3.0 Type 6
Environment	
Operating Temperature	0°C to 60°C
Storage Temperature	-40°C to 85°C
Humidity	5% to 95% Humidity, Non-condensing
Relative Humidity	95% at 60°C
Shock	<ul style="list-style-type: none"> <li>▪ IEC 60068-2-27</li> <li>▪ SSD : 50G @wallmount, Half-sine, 11ms</li> </ul>
Vibration	<ul style="list-style-type: none"> <li>▪ IEC 60068-2-64</li> <li>▪ SSD : 5Grms, 5Hz to 500Hz, 3 Axis</li> </ul>
EMC	CE, FCC

## Packing List

VCOM-1600	x1
Driver CD	x1

## Order Information

VCOM-1600-x6425RE	Compact COM Express Type 6 with Intel Atom® x6425RE (4 core)
VCOM-1600-x6211E	Compact COM Express Type 6 with Intel Atom® x6211E (2 core)

## Optional Software

VHub AI Developer	AI Development Kit
VHub ROS	AMR Development Kit
VHub EtherCAT	I/O Control Platform

# Block Diagram

