

PCOM-B638VG

Intel® Core™ Kaby Lake-U/Skylake-U i7/i5/i3 series processor based on Type 6 Compact COM-Express® module with 2x DDR4 SD-DIMM Socket



FEATURES

- Intel® Core™ Kaby Lake-U/Skylake-U i7/i5/i3 7000, 6000 series processors
- DDR4 SDRAM up to 32GB 2133 MT/s
- Multiple Displays VGA, LVDS/eDP, DP, HDMI
- Widely voltage support 6V to 18V



PCOM-B638VGL, a type 6 compact COM Express® (95 x 95 mm) module which based on Intel® Kaby Lake-U/Skylake-U® i7/i5/i3 and Celeron® processors. In this architecture, PCOM-B638VG could provide VGA, LVDS, and high quantity HDMI, eDP, DP displays, also included turbo mode up to 3.4GHz, and expandability I/O interfaces such as 5x PCIe 3.0 x 1, 4x USB 3.0, 8x USB 2.0, and 3x SATA III devices. With this ultra low power consumption required (15W), PCOM-B638VG could provide a very energy saving solution to different vertical market, such as automation, healthcare, transportation and retails.

General

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Product	PCOM-B638VG			
Form Factor	Type 6, Compact Form Factor Com Express (95 x 95mm)			
Processor	Intel® Celeron®	Intel® Core™		
	3955U	i3-6100U	i5-6300U	i7-6600U
Core	2	2	2	2
Freq.	2.00 GHz	2.30 GHz	2.40 GHz	2.60 GHz
Turbo	N/A	N/A	3.00 GHz	3.4 GHz
Cache	2MB	3MB	3MB	4MB
Processor Graphics	Intel® HD Graphics 510	Intel® HD Graphics 520	Intel® HD Graphics 520	Intel® HD Graphics 520
Graphics Base Frequency	300 MHz	300 MHz	300 MHz	300 MHz
Graphics Max Dynamic Frequency	900 MHz	1.00 GHz	1.00 GHz	1.05 GHz
HW Encoding	HEVC, VP8, VP9, VDENC			
HW Decoding	HEVC, VP8, VP9, VDENC			
HW Acceleration	DX11/12, OCL 2.x, OGL 4.3/4.4, ES 2.0			
Processor TDP	15W	15W	15W	15W
BIOS	AMI BIOS			
ECC Memory Supported	NO			
Memory	DDR4 SDRAM up to 32GB 2133 MT/s			

I/O Interface

SATA	2x SATA III 1x SATA III(Optional)		
USB	4x USB 3.0 8x USB 2.0		
Ethernet	Intel® Ethernet Controller I219LM		
Serial I/O	GPIO	8 GPIO	
	I ² C	Baud Rate : 400KHz	
	SMBus	Baud Rate : 100KHz	
	UART	2 Serial Port (Tx/Rx)	
PEG	4x PCIe 3.0 x 1		
PCI Express	5x PCIe 3.0 x 1		
Display	Default	Options	Resolution
	eDP	LVDS(24bit, dual channel)	up to 2560x 1600 @ 60Hz
		eDP	up to 4096x 2304 @ 24Hz
	DDI1	DP	up to 3840x 2160 @ 24Hz
		HDMI	up to 4096x 2160 @ 24Hz
	DDI2	VGA	up to 2560x 1600 @ 60Hz
DP		up to 3840x 2160 @ 24Hz	
	HDMI	up to 4096x 2160 @ 24Hz	
Security	TPM 2.0, Intel®AES		

MECHANICAL & ENVIRONMENT

Dimension	95 x 95mm
Power DC IN	Normal : +12V Wide range : +6VDC - +18VDC AT/ATX Mode
Storage Temperature	-20°C to 85°C
Operation Temperature	0°C to 60°C
Certification	Contact us
MTBF	Over 100,000 hours at 40 ° C
Vibration	Random 5Hz to 2KHz, 7.7 grms, 10min in each of 3 axes
OS	Windows 7/ 8/ 8.1/ 10/ Microsoft Windows 2008 R2 SP1/ 2012/ 2012 R2 Linux Fedora 22/ Ubuntu 15.04

ORDERING GUIDE

Product	Ordering P/N	Status
PCOM-B638VG-6600U	AB1-3E39	Available
PCOM-B638VG-6300U	AB1-3E38	Available
PCOM-B638VG-6100U	AB1-3E32	Available
PCOM-B638VG-3955U	AB1-3E77	Available
PCOM-B638VG-7600U	AB1-3G88	Available
PCOM-B638VG-7300U	AB1-3G87	Available
PCOM-B638VG-7100U	AB1-3G86	Available
PCOM-B638VG-3965U	AB1-3G85	Available

Accessory	Ordering P/N	Status
Cooler	B9971380	Available
Heat Sink	B8308660	Available
Heat Spreader	B8308500	Available
PCOM-C605(Min-ITX Carrier board)	AB1-3998	Available
PCOM-C60B(ATX Carrier board)	AB1-3G22Z	Contact us

BLOCK DIAGRAM

PCOM-B638VG

COM Express® Type 6
Compact Module 95x95mm

AT / ATX Mode

12 VDC

0 ° C ~ +60 ° C

