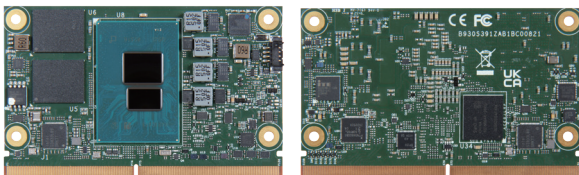


PCOM-BC00

SMARC 2.2 Compliant module (82 x 50 mm) powered by Intel® Alder Lake-N, Amston Lake (Atom® x7000RE), and Twin Lake (Core Processor N) Series SoCs, featuring onboard LPDDR5 SDRAM



FEATURES

- Intel® Alder Lake N & Amston Lake & Twin Lake series
- On board LPDDR5 SDRAM up to 16GB
- On board eMMC up to 256GB
- Support wide temperature -40°C ~ 85°C (Selected SKU)
- Support Intel® TCC/TSN with 2.5GbE (Selected SKU)
- Low Power Consumption (6W to 15W), 4K Display resolution

General

General						
Product	PCOM-BC00					
Form Factor	SMARC Form Factor (82 x 50 mm)					
CPU Series	PC Client		Industrial RE Series			
	N97	N355	x7211RE	x7213RE	x7433RE	x7835RE
Core	4	8	2	2	4	8
Frequency	2.0 GHz	1.0 GHz	1.0 GHz	2.0 GHz	1.5 GHz	1.3 GHz
Turbo Frequency	3.6 GHz	3.9 GHz	3.2 GHz	3.4 GHz	3.4 GHz	3.6 GHz
Intel® Smart Cache	6 MB					
Intel® Gfx EU	24EU	32EU	16EU	16EU	32EU	32EU
Graphics Max Freq.	1.2 GHz	1.35 GHz	800 MHz	800 MHz	800 MHz	1.0 GHz
Processor TDP	12W	15W	6W	9W	9W	12W
Support Temperature	0°C to 60°C		-40°C~85°C			
PCH	SoC					
Memory (on board LPDDR5)	8GB	16GB	8GB	16GB	16GB	16GB
ECC Memory Support	Non-ECC (In-Band ECC)					
Storage (on board eMMC)	64G	64G	32G	32G	64G	256G

I/O Interface

SATA	1x SATA III		
USB	2 x USB 3.2 Gen2 6 x USB 2.0		
Ethernet	2 x 2.5G NBASE-T Ethernet (via Intel i226 series)		
Serial I/O	GPIO		8 bit GPIO (default 4 input/4 output)
	I²C		Baud Rate:3.2MHz
	SMBus		Baud Rate:1MHz
	UART		2 Serial Port (Tx/Rx)
	eSPI		eSPI share with SPI1
	CANBus		2 x CANBus (Optional)
PCI Express Gen3	4x PCIe 3.0 x1 / 2x 3.0 x2		
Display	Module display interface	Carrier output options	Resolution
	Primary Display	eDP up to 4K	3840 x 2160@120Hz
	Secondary Display	LVDS (24bit, dual channel)	1920 x 1200@60Hz
	Third Display	DP 1.4 up to 4K	3840 x 2160@120Hz
CSI	HDMI 2.0b A		4096 x 2160@60Hz
	DP++ up to 4K		
Security	Support 2x MIPI-CSI (4ch + 2ch) camera interface down to carrier		
	TPM 2.0		

MECHANICAL & ENVIRONMENT

Dimension	82 x 50mm
Power DC IN	5V +/-5% (4.75-5.25V)
Storage Temperature	-40°C to 85°C
Operating Temperature	0°C to 60°C -40°C to 85°C(Industrial SKU)
Certification	TBD
MTBF	TBD
Vibration	TBD
OS	Windows 11 Ubuntu

ORDERING GUIDE

Product	Ordering P/N	Status
PCOM-BC00-N355-16G-256G	TBD	In development
PCOM-BC00-x7211RE-4G-32G	TBD	In development
PCOM-BC00-x7213RE-8G-32G	TBD	In development
PCOM-BC00-x7433RE-16G-64G	TBD	In development
PCOM-BC00-x7835RE-16G-256G	TBD	In development
PCOM-BC00-x7211E-4G-32G	TBD	In development
PCOM-BC00-x7213E-8G-32G	TBD	In development

Accessory	Ordering P/N	Status
Cooler (Aluminum)	TBD	In development
Heatsink (Aluminum)	TBD	In development
Heatspreader (Aluminum)	TBD	In development
Cooler (Copper)	TBD	In development
Heatsink (Copper)	TBD	In development
Heatspreader (Copper)	TBD	In development
PCOM-CC01 (Micro-ATX Carrier board)	TBD	In development

BLOCK DIAGRAM

PCOM-BC00

