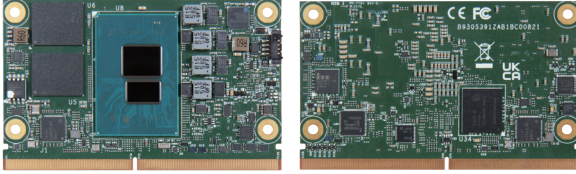


# PCOM-BC00

SMARC 2.2 Compliant module (82 x 50 mm) powered by Intel Atom® x7000RE Series Processors, Intel® Core™ Processor N-series, and Intel® Processor N-Series, featuring onboard LPDDR5 SDRAM



## FEATURES

- Intel Atom® x7000RE series processors (Amston Lake), Intel® Core™ 3 Processor N355 (Twin Lake), and Intel® Processor N97 (Alder Lake-N)
- Onboard LPDDR5 SDRAM up to 16GB
- Onboard eMMC up to 256GB
- Supports wide temperature -40°C ~ 85°C (Selected SKUs)
- Supports Intel® TCC/TSN with 2.5GbE (Selected SKUs)
- Low power consumption (6W to 15W), 4K display resolution

## 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)
	I <sup>2</sup> C		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
		LVDS (24bit, dual channel)	1920 x 1200@60Hz
	Secondary Display	DP 1.4 up to 4K	3840 x 2160@120Hz
HDMI 2.0b A		4096 x 2160@60Hz	
Third Display	DP++ up to 4K		
CSI	Support 2x MIPI-CSI (4ch + 2ch) camera interface down to carrier		
Security	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	In process	In development
PCOM-BC00-x7211RE-4G-32G	In process	In development
PCOM-BC00-x7213RE-8G-32G	In process	In development
PCOM-BC00-x7433RE-16G-64G	In process	In development
PCOM-BC00-x7835RE-16G-256G	In process	In development
PCOM-BC00-x7211E-4G-32G	In process	In development
PCOM-BC00-x7213E-8G-32G	In process	In development

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

## BLOCK DIAGRAM

## PCOM-BC00

