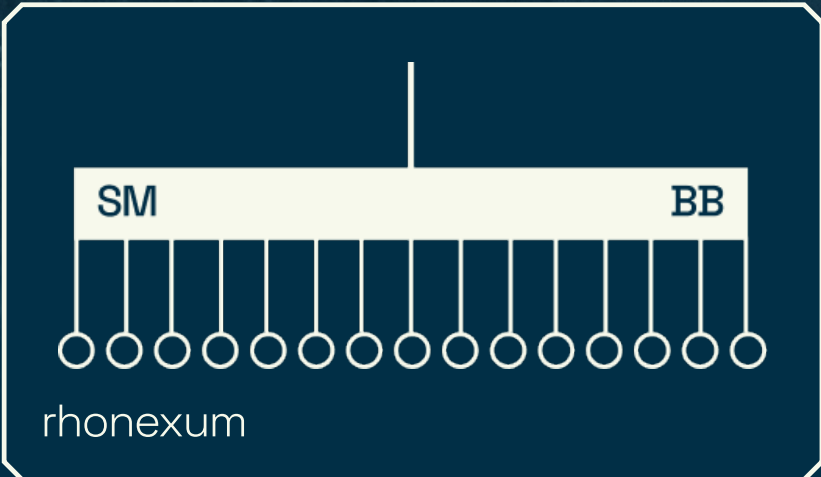
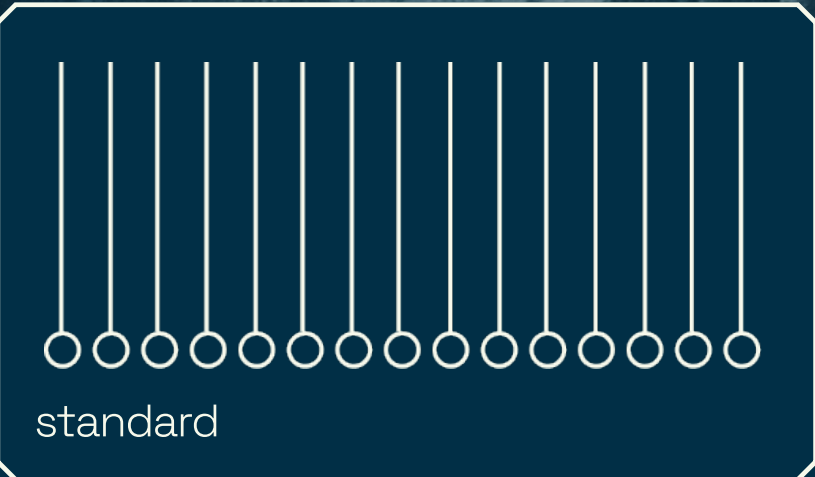
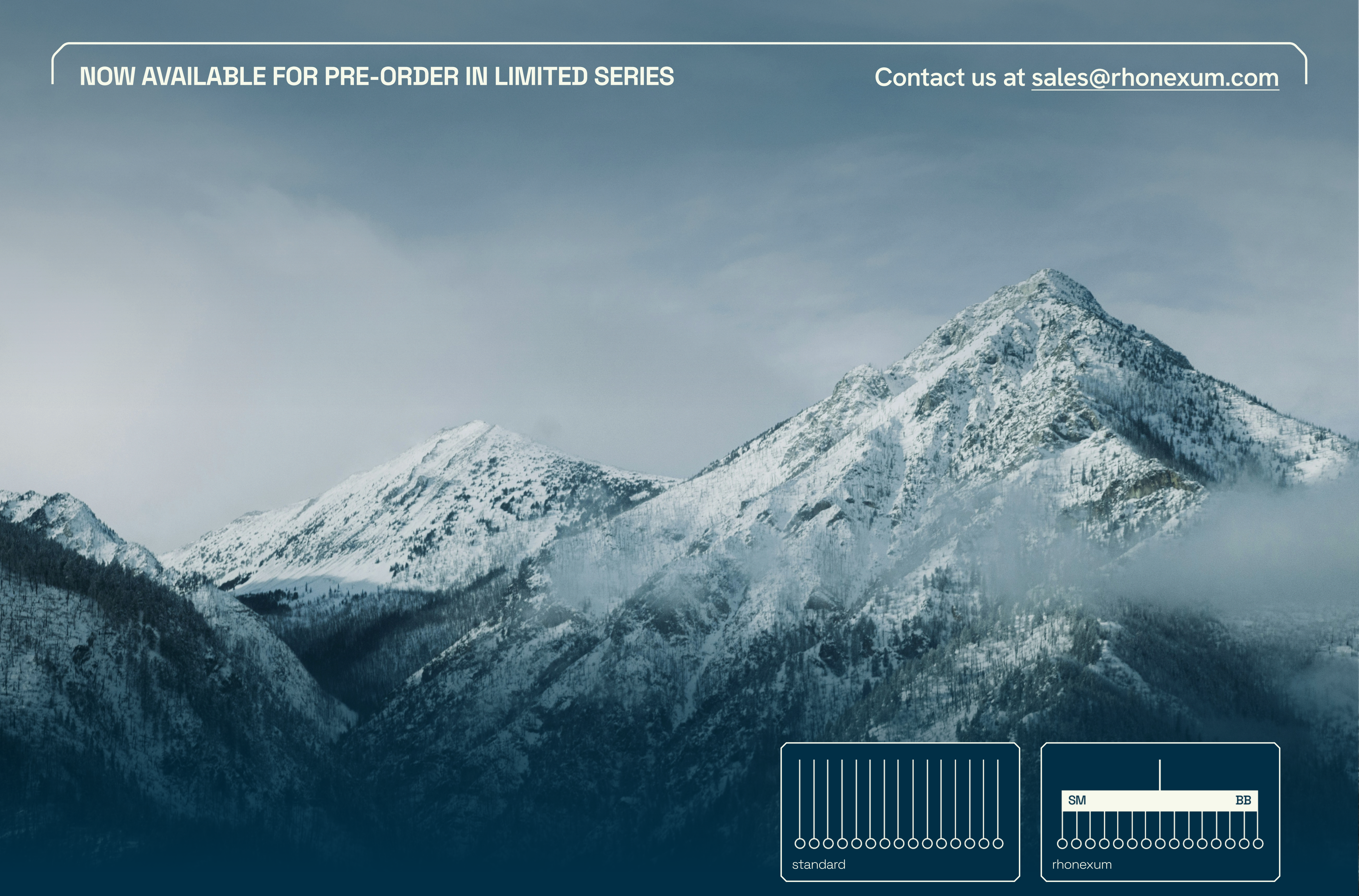


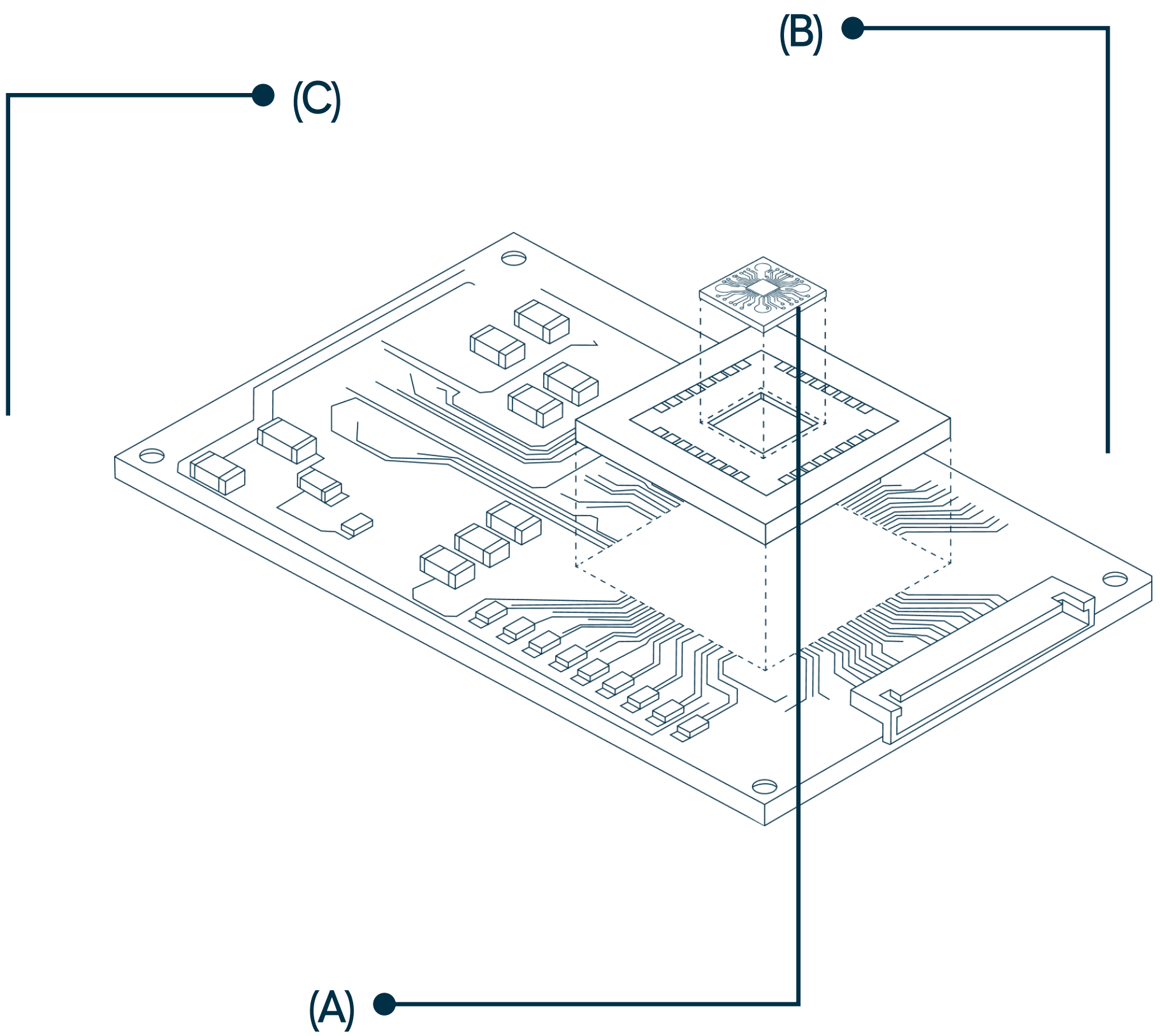


BN-SM-BB: CRYOGENIC SWITCH MATRIX,

first plug and play routing system,
designed for extreme cold environments.

Rhonexum[®]

The **BN-SM-BB** is a Rhonexum’s Cryogenic CMOS technology that **overcomes the electrical interconnection bottleneck in extremely cold environments**. With routing and demultiplexing **integrated within the cryostat**, it **offers enhanced control and readout capabilities** for cryogenic devices **with minimal effects** on the **thermal budget** or **signal quality**, providing a fully modular and **plug-and-play solution**.



In next few months, commercialized version of the (A) bare die, (B) IC packaging and (C) embedded on a PCB.

SPECIFICATIONS

	Nominal	
OPERATING TEMPERATURE	4K	77K ~ mK
SIGNAL BANDWIDTH	DC ~ few GHz	
VOLTAGE SWING	5V	
MULTIPLEXING RATIO	1, 2, 4, 16	

- SUPERCONDUCTING NANOWIRE SINGLE-PHOTON DETECTORS
- SUPERCONDUCTING FLUX CONTROL
- CRYOGENICS TESTING SYSTEMS
- TRAPPED ION

APPLICATIONS

Enhanced both Scalability of Qubits and Cryogenic Devices

≈10X

Reduction in thermal load

90%

Fewer cryogenic cables

UP TO 94%