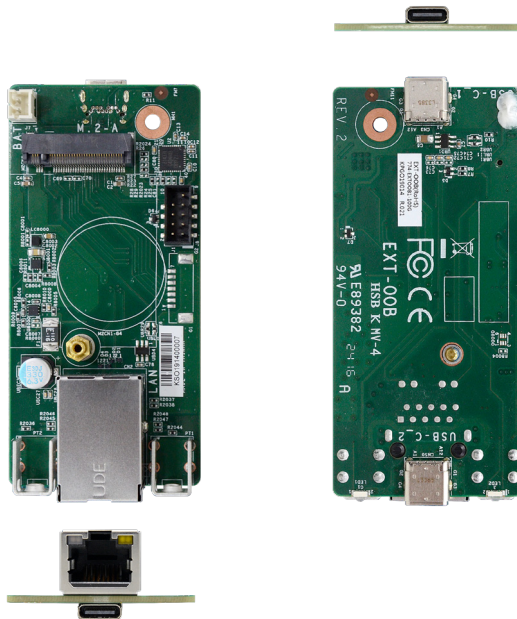


# EXT-OOB

## M.2 Out Of Band Module Compact BMC Peripheral

A hardware module that provides secure Out-Of-Band device monitoring and management functions over the connected edge system.



Top View

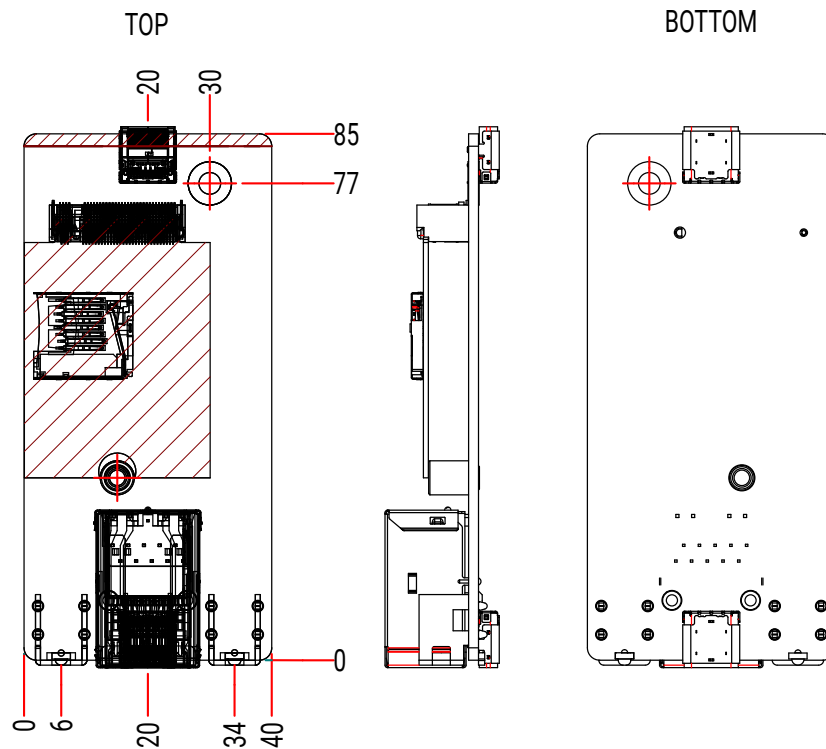
Bottom View

### KEY FEATURES

- ARM926EJ-S microprocessor embedded
- Low power consumption of less than **0.5 W**
- Built-in **Out-Of-Band (OOB)** remote management including remote power on/off, remote hardware monitor, remote BIOS setup, remote BIOS update and optional remote OS recovery



### MECHANICAL DRAWING



SPECIFICATION

Out-Of-Band Monitoring and Management Functions	Processor	Nuvoton NUC980DK71YC (LQFP-128, 128MB DDR2)
	Power Cycling	<ul style="list-style-type: none"><li>Enforcement Shutdown</li><li>Power Switch On / Off</li><li>Reset</li></ul>
Signal Interface	Connector	Proprietary M.2 Pin Definition by DFI
	Factory Reset	Factory Reset Button (5 Seconds Pressed)
	Configuration Lock	2 DP switch (default: both disabled)
	Storage	128MB SPI NAND Flash Micro SD Slot (Co-layout with optional eMMC)
	LED Indicator Lights	MCU Activated
Environment	Operating Temperature	-5 to 65°C (On Industrial Motherboard)
	Operation Humidity	5 to 90% (Non-condensing)
	Storage Temperature	-40 to 85°C
	Certification	CE / FCC / RoHS & REACH Compliant
Mechanical	Dimensions	89.80 x 45.60mm

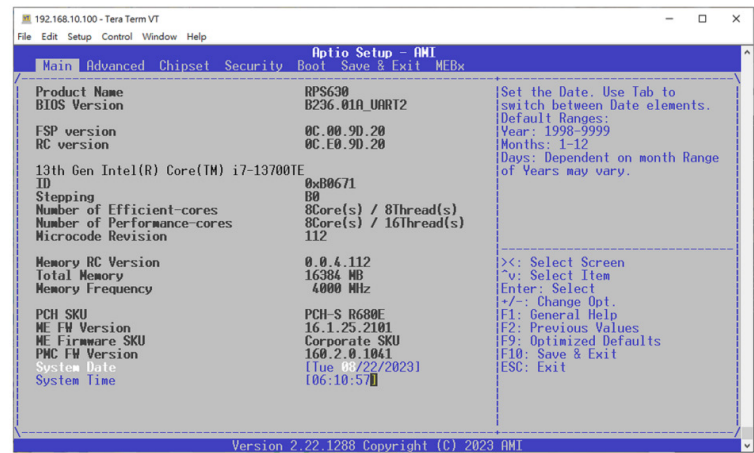
PACKING LIST

• 1 M2A-OOB module	774-M2A00B-100G
• 1 EXT-OOB carrier board	774-EXT00B1-100G
• 1 USB cable (Length: 100mm)	A81-001197-018G
• 1 SPI cable (Length: 250mm)	A81-009808-016G
• 1 OOB cable (Front Panel, COM, I2C, 5VSB)	A81-009810-018G
• 1 COM transfer cable (Length: 50mm)	A81-009809-016G
• 1 USB transfer cable (Length: 50mm)	A81-009824-016G
• 1 Bracket	A31-028S33-000G

ORDERING INFORMATION

Model Name	Part Number	Description
EXT-OOB	770-EXT00B1-000G	EXT-OOB Carrier Board w/o M2A-OOB
EXT-OOB	770-EXT00B1-100G	EXT-OOB Carrier Board w/ M2A-OOB

BASIC FUNCTION



- Remote power on / off & reset control
- Remote hardware monitor log (OpenSSH)
- Remote BIOS setup & UEFI shell (Serial over LAN)
- Remote BIOS update
- Remote BIOS update (SOL & DFI USB-Storage)
- Remote Recovery OS Image (UEFI text mode)
- \*OS recovery only support windows