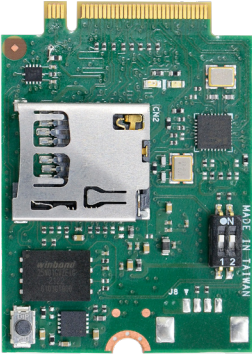# M2A-OOB

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.
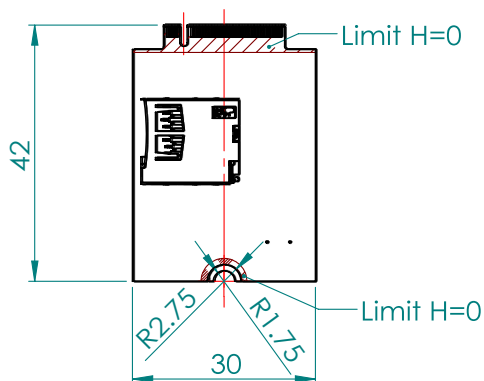

Top View

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
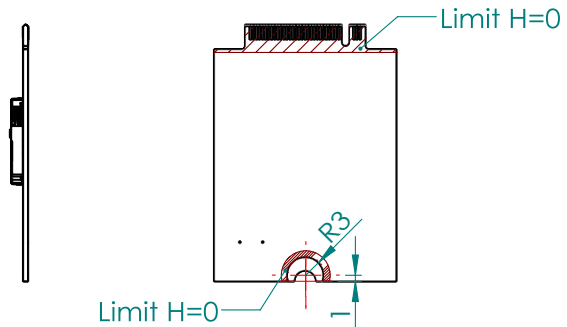- Optional wireless connection (WLAN, WWAN) with **EXT-OOB Carrier Board**

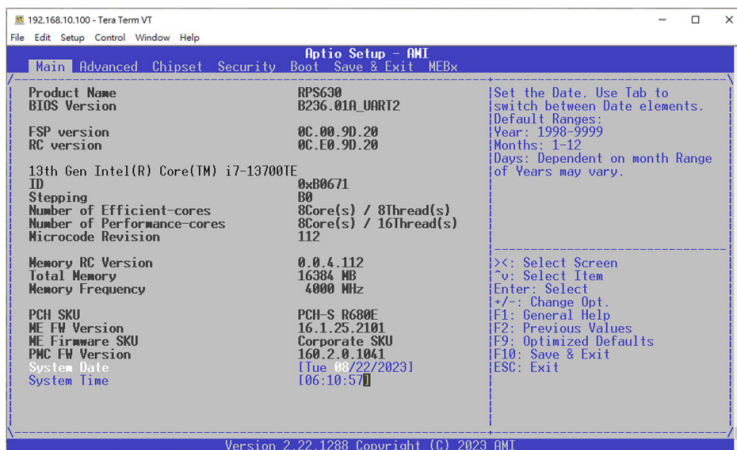## MECHANICAL DRAWING

TOP
Limit H=1.15mm

Limit H=0

42

R2.75   R1.75

30

Limit H=0

BOTTOM
Limit H=1.15mm

Limit H=0

R3

Limit H=0

1

SPECIFICATION

Out-Of-Band Monitoring and Management Functions	**Processor**	Nuvoton NUC980DK71YC (LQFP-128, 128MB DDR2)
	Power Cycling	• Enforcement Shutdown • Power Switch On / Off • Reset
	Applied Model	RPS630-R680E
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
Network Interface	**Ethernet**	1-port 10/100 Mbps RJ45 Ports via M.2 A key (via NC-SI)
Power Requirement	**Connector**	Proprietary M.2 Pin Definition by DFI
Hardware	**Dimensions**	M.2 3042: 30mm x 42mm
Environment	**Operating Temperature**	-5 to 65ºC (On Industrial Motherboard)
	Operation Humidity	5 to 90% (Non-condensing)
	Storage Temperature	-40 to 85°C
	Certification	CE / FCC / RoHS & REACH Compliant

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)

Optional Remote Recovery OS Image (UEFI text mode)