

### SBC-TANARO-MX8M-Mini

Single Board Computer (SBC) based on NXP i.MX8M Mini processor

## High performance with low power consumption for edge computing with integrated connectivity and mulitmedia interface



### HIGHLIGHTS



CPU

NXP i.MX 8M Mini Family



CONNECTIVITY

Wifi/BT, 1x GbE, 1x 100MbE, up to 3x USB, 2x RS232, RS485, CAN



GRAPHICS GC320 2D d

GC320 2D accelerator + GCNanoUltra 3D accelerator



MEMORY

Soldered on Board LPDDR4 memory





### MAIN FIELDS OF APPLICATION









Medical

Industrial Automation

Smart Devices

Digital Signage

### FEATURES

← USB

Processor	NXP i.MX 8M Mini Family based on Arm® Cortex®-A53 cores + general purpose Cortex®-M4 400MHz processor:  i.MX 8M Mini Quad – Full featured, 4x Cortex®-A53 cores up to 1.8GHz  i.MX 8M Mini Dual – Full featured, 2x Cortex®-A53 cores up to 1.8GHz  i.MX 8M Mini Solo – Full featured, 1x Cortex®-A53 cores up to 1.8GHz  i.MX 8M Mini Quad Lite Full featured, 4x Cortex®-A53 cores up to 1.8GHz  i.MX 8M Mini Dual Lite – Full featured, 2x Cortex®-A53 cores up to 1.8GHz  i.MX 8M Mini Dual Lite – Full featured, 1x Cortex®-A53 cores up to 1.8GHz  i.MX 8M Mini Solo Lite – Full featured, 1x Cortex®-A53 cores up to 1.8GHz	
Memory	1 GB 32 bit LPDDR4	
Graphics	GC320 2D accelerator + GCNanoUltra 3D accelerator Embedded VPU (not for Lite processors), able to offer: VP9, HEVC/H.265, AVC/H.264, VP8 HW Decoding AVC/H.264, VP8 HW encoding OpenGL ES 2.0, OpenVG 1.1 support	
Video Interfaces	LVDS Single/Dual Channel connector MIPI-CSI Camera interface connector	
Video Resolution	Up to 1920x1080p60, 24bpp	
Mass Storage	eMMC: 4 GB MLC SD slot: 4 bit MMC/SDIO/SD/SDHC	
문 Networking	Ix GbEthernet interfaces Ix 100MbEthernet shielded single band WiFi 802.11 b/g/n with BT 4.0 mPCle (half size) socket for modems	

1x USB 2.0 OTG micro-AB

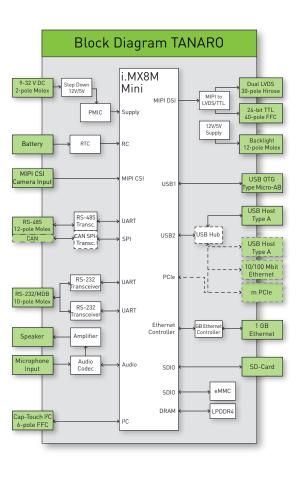
up to 2x USB 2.0 Type-A

	l.ii	Audio	1x speaker (connector), 1 W RMS (8 $\Omega$ ) parallel to internal speaker Digital Mic In connector (2x PDM inputs)
0	, Jo	Serial Ports	2x RS-232, RS-485
=		Power Supply	9 ÷ 32 V <sub>DC</sub>
_	os	Operating System	Yocto
•	Z,	CAN Bus	1x CAN (ISO/DIS 11898)
		Operating Temperature*	0°C ÷ +60°C
1		Dimensions	159.0 x 18.0 x 80.0 mm

\*Measured at any point of SECO standard heatspreader for this product, during any and all times (including start-up). Actual temperature will widely depend on application, enclosure and/or environment. Upon customer to consider application-specific cooling solutions for the final system to keep the heatspreader temperature in the range indicated.



### BLOCK DIAGRAM





# Streamline and expedite your edge computing implementations

### **EDGEHOG OS**

A flexible operating system that adapts to your needs, thanks to the customization tool and Docker support. Reliability and security are built-in through a dual-partition system and native integration with Exein's robust Al-based protection.

### **DATA ORCHESTRATION**

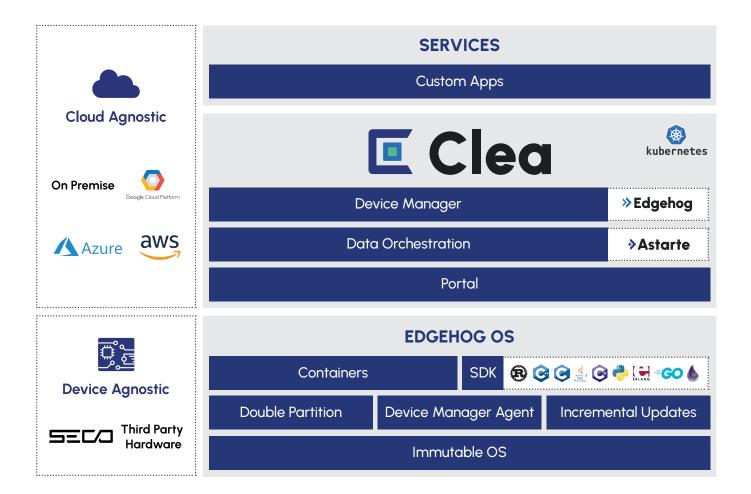
Integrate third-party services, simplify data flows and analysis, and enhance business efficiency by enabling easy and fast utilization of AI.

### **DEVICE MANAGER**

Update, configure, and manage remote devices. Optimize time and costs to maximize operational efficiency and security without the need for costly field interventions.

### **PORTAL**

Analyze data from remote devices, customize the user experience with applications tailored to user needs, and manage user rights, company access, and tenant privileges.



Scan to know more about our solution

**EDGEHOG OS** 



**CLEA DOCS** 



