



Nitrogen8M_Mini SOM

Introducing the Nitrogen8M_Mini SOM, featuring NXP's new i.MX 8M Mini applications processor. The RAM (2-4GB), and eMMC (8-128) can be modified to fit your requirements. The Nitrogen8M_Mini SOM is designed for mass production use with a guaranteed 10 year life span, FCC Pre-scan results, and a stable supply chain. Industrial temperature and conformal coating options are available. No cost carrier board review is available with volume purchase. [Contact us](#) for more information.

Pre-orders are now being taken with shipments due to begin late-march.

As low as with volume discounts

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Software Wiki

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Software and Set-Up

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Specifications

Software

Documentation

CPU

CPU Name

i.MX 8M Mini

CPU Type

x4 Cortex-A53 + x1 Cortex-M4F

CPU Cores

4

CPU Clock (Max)

1.5-2.0 GHz

Memory & Storage

RAM

2GB LPDDR4 (Up to 4GB)

eMMC

8GB (Up to 128GB)

Multimedia

2D/3D Graphics Acceleration

GCNanoUltra for 3D, GC320 for 2D

Video Encode / Decode

1080p60 H.264, VP8/1080p60 H.265, H.264, VP8, VP9

Camera Interfaces

x1 4-Lane MIPI CSI

Display Connections

HDMI

N/A

LVDS

N/A

PCB

N/A

MIPI DSI	x1 4-Lane (1080p60)
Networking Connections	
Ethernet	10/100/1GB
WiFi	Certified 802.11ac (via Carrier)
Bluetooth	BT4.1 (via Carrier)
Audio Interfaces	
Headphone	x1 (WM8960) (via Carrier)
Microphone	x1 (via Carrier)
Amplifier	2W (1W per channel) (via Carrier)
Connectivity Ports	
I2C	x3 (via Carrier)
SPI	x1 (via Carrier)
UART	Up to 4 (via Carrier)
USB	x4 USB 2.0 (via Carrier)
SATA	N/A
RTC	x1 + battery (via Carrier)
PCIe	X1 (via Carrier)
PoE	Optional (via daughter board)
SD / MMC	UHS SD Card Support
PCB Specifications	
Dimensions (L x W)	67.6mm x 48.4mm
Miscellaneous Specifications	
Temperature Rating	Commercial 0-70C (-40 – +85C optional)
Power Supply	5V

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Boundary Devices is a leading supplier of i.MX-based SBCs and SOMs for the general embedded market. Headquartered in Lake Forest, CA, Boundary Devices is an ISO9001 certified NXP proven partner that has completed thousands of successful projects with the i.MX family of processors.

Latest Blog Posts

Official Release of the Nitrogen8M_Mini
Featuring i.MX8M Mini

Boundary Devices is pleased to announce the official release of our Nitrogen8M_Mini SBC & SOM for the general.

Welcome to the New Boundary Devices
Website

We are very excited to announce the launch of our newly designed website at BoundaryDevices.com. We have spent.

Contact Us

Boundary Devices
7 Orchard Road, Suite 102,
Lake Forest, California 92630

info@boundarydevices.com
Tel. (602) 212-6744

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