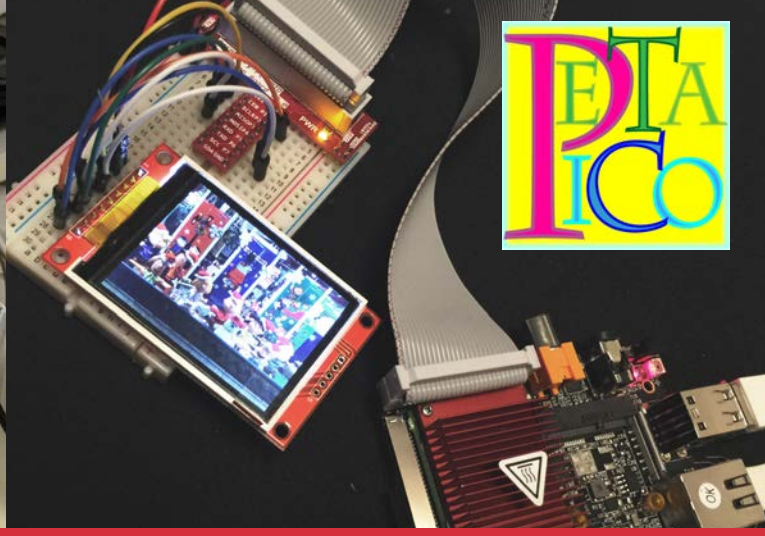


CuBox-i – The little computer that can

SolidRun's CuBox-i mini computers are robust low-power machines, providing users with a wide range of applications.

SolidRun WiKiサイト：https://wiki.solid-run.com/doku.php?id=products:imx6
SolidRunフォーラムサイト：http://forum.solid-run.com/
PetapicoShopサイト:　https://www.petapico.biz/
　Petapicoショップサイトのペタピココラムには色々なOSのインストールの仕方、アプリの情報や遊び方のヒントが紹介されています。

	CuBox-i1	CuBox-i2	CuBox-i2eX
System on Chip	i.MX6 Solo	i.MX6 Dual Lite	i.MX6 Dual
Core Count	1 @ 1 GHz	2 @ 1 GHz	2 @ 1 GHz
Memory Size	512MByte DDR3	1GByte DDR3	1GByte DDR3
Memory Config	32 bit @ 800Mbps	64 bit @ 800Mbps	64 bit @ 1066Mbps
GPU	GC880	GC880	GC2000
3D GPU Type	OpenGL|ES 1.1/2.0	OpenGL|ES 1.1/2.0	OpenGL|ES 1.1/2.0,OpenCL
HW Video Dec/Enc	Multi Format	Multi Format	Multi Format
HDMI 1080p with CEC	1.4, 3D support	1.4, 3D support	1.4, 3D support
Ethernet	10/100 Mbps	10/100 Mbps	10/100/1000 Mbps (*)
Powered USB 2.0	2 x Hosts	2 x Hosts	2 x Hosts
WiFi 11n/BlueTooth	Optional	Optional	Optional | Built In
Micro SD Interface	○	○	○
eSATA II 3Gbps	—	—	○
RTC With Backup Battery	—	—	○
Optical S/PDIF Audio Out	○	○	○
Micro USB to RS-232	—	—	○
InfraRed for Remote Control	Receiver	Receiver	Receiver & Transmitter

CuBox-i　アプリによって５機種から選べます

	CuBox-i4pro	CuBox-i4x4
System on Chip	i.MX6 Quad	i.MX6 Quad
Core Count	4 @ 1 GHz	4 @ 1 GHz
Memory Size	2GByte	4GByte
Memory Config	64 bit @ 1066Mbps	64 bit @ 1066Mbps
GPU	GC2000	GC2000
3D GPU Type	OpenGL|ES 1.1/2.0,OpenCL 1.1E	OpenGL|ES 1.1/2.0,OpenCL 1.1E
HW Video Dec/Enc	Multi Format	Multi Format
HDMI 1080p with CEC	1.4, 3D support	1.4, 3D support
Ethernet	10/100/1000 Mbps (*)	10/100/1000 Mbps (*)
Powered USB 2.0	2 x Hosts	2 x Hosts
WiFi 11n/BlueTooth	Optional | Built In	Built In
Micro SD Interface	○	○
eSATA II 3Gbps	○	○
RTC With Backup Battery	○	○
Optical S/PDIF Audio Out	○	○
Micro USB to RS-232	○	○
InfraRed for Remote Control	Receiver & Transmitter	Receiver & Transmitter

(*) 1000Mbps link is limited to 470Mbps actual bandwidth due to internal chip busses limitation.

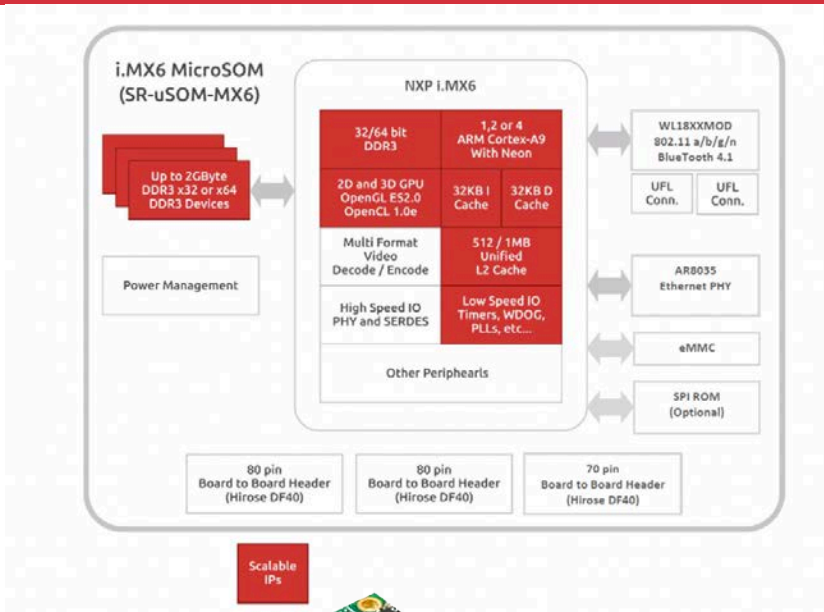
SolidRun
EMBEDDED EDGE COMPUTING

i.MX6 SOM – System On Module

MicroSOMはSolidRunによって作成されたモジュールフォーマットで、マイクロフォーマットのSystem on Moduleを意味します。 System on Chip（SoC）とは異なり、MicroSOMはSystem on Chipを含む集積回路ボードであり、コアシステム機能に必要な主要機能も備えています。 通常、各SOMには物理メモリ、イーサネット物理ヘッダーハードウェア、物理回線、アンテナ接続に必要なハードウェアが組み込まれており、組み込みSoCでWiFi / Bluetooth機能が利用できる場合にはそのSOMに含まれます。

MicroSOMは、より大きい目的のシステムに対して、入力、出力、および他の統合機能を提供する「キャリア」に接続されたモジュールを意図しています。 SolidRunは、Cubox-iやHummingBoardなどの2つの主要キャリア製品を提供していますが、MicroSOMインターフェイスの仕様は、必要に応じて他のOEM製品にご利用いただけるように公開されています。（MicroSOMだけでの購入が可能です）

iMX6-SoC シリーズでは、１コアのSoloから４コアのQuadまで４種類があり、それぞれWiFi/Bluetoothと対応温度グレードで選択ができます。



SOM iMX6 Solo

SOM i.MX6 Quad |Dual-lite |Dual

オプション：
- WiFi,Bluetooth
- 対応温度
  - Commercial (0C…60C)
  - Industrial (-40C…85C)
  - Automotive (-40C…105C)

i.MX6 SOM – System On Module

	MicroSOM i1	MicroSOM i2	MicroSOM i2eX	MicroSOM i4pro
Processor Core	Single Core ARM A9	Dual Core ARM A9	Dual Core ARM A9	Quad Core ARM A9
Processor Speed	1GHz	1GHz	1GHz	1GHz
Floating Point	VFPv3	VFPv3	VFPv3	VFPv3
SIMD	NEON	NEON	NEON	NEON
Graphics Processing Unit	Vivante GC880	Vivante GC880	Vivante GC2000	Vivante GC2000
3D GPU Support	OpenGL ES1.1/2.0	OpenGL ES1.1/2.0	OpenGL ES1.1/2.0, OpenCL 1.1E	OpenGL ES1.1/2.0, OpenCL 1.1E
HW Video Dec/Enc	Multi Format	Multi Format	Multi Format	Multi Format
Memory	32-bit, 512MB DDR3 @ 800Mbps	64-bit, 1GB DDR3 @ 800Mbps	64-bit, 1GB DDR3 @ 1066Mbps	64-bit, 2GB DDR3 @ 1066Mbps
Wired Network *1	10/100	10/100	10/100/1000 Mbps1	10/100/1000 Mbps1
Wireless Network*2	Optional (WL1831)	Optional (WL1831)	Optional (WL1831)	Optional (WL1831)
Bluetooth	Optional (WL1831)	Optional (WL1831)	Optional (WL1831)	Optional (WL1831)
Display Max Resolution	HDMI: 1080p, LCD: WUXGA(1920 x 1200)	HDMI: 1080p, LCD: WUXGA(1920 x 1200)	HDMI: 1080p, LCD: WUXGA(1920 x 1200)	HDMI: 1080p, LCD: WUXGA(1920 x 1200)
Dual Display Support	LVDS, HDMI 1.4, DSI, Parallel	LVDS, HDMI 1.4, DSI, Parallel	LVDS, HDMI 1.4, DSI, Parallel	LVDS, HDMI 1.4, DSI, Parallel
Supported Internal Storage	NOR-Flash, eMMC, SD/ microSD, PCIe SSD	NOR-Flash, eMMC, SD/ microSD, PCIe SSD	NOR-Flash, eMMC, SD/ microSD, PCIe SSD	NOR-Flash, eMMC, SD/ microSD, PCIe SSD
SD/MMC	3	3	3	3
USB 2.0 Host	1	1	1	1
USB OTG	1	1	1	1
Serial Ports	3	3	3	3
Digital audio serial interface	1	1	1	1
Camera interface port	2 Lane MIPI CSI	2 Lane MIPI CSI	4 Lane MIPI CSI	4 Lane MIPI CSI
CAN Bus	○	○	○	○
SATA	×	×	GenII, 3Gbps	GenII, 3Gbps
PCI-Express 2.0	x1	x1	x1	x1
Second Ethernet	via PCIe or USB NIC	via PCIe or USB NIC	via PCIe or USB NIC	via PCIe or USB NIC
I2C	3	3	3	3
SPI	3	3	3	3
PWM	4	4	4	4
GPIO	75	75	75	75
JTAG	Test Point Header	Test Point Header	Test Point Header	Test Point Header
S/PDIF Input	○	○	○	○
S/PDIF Output	○	○	○	○
1-Wire	1-Wire Transceiver on carrier board	1-Wire Transceiver on carrier board	1-Wire Transceiver on carrier board	1-Wire Transceiver on carrier board
RTC	On Carrier	On Carrier	On Carrier	On Carrier
wiki page	https://wiki.solid-run.com/doku.php?id=products:imx6:microsom:solo	https://wiki.solid-run.com/doku.php?id=products:imx6:microsom:dual_lite	https://wiki.solid-run.com/doku.php?id=products:imx6:microsom:dual	https://wiki.solid-run.com/doku.php?id=products:imx6:microsom:quad
Temperature Range	Commercial, Extended, Industrial			
Main Voltage	5V			
IO Voltage	3.3V			
SoM Interface	Hirose DF40 connectors 1.5mm (up to 4.0mm mating height available)			
Dimensions	47mm x 30mm			

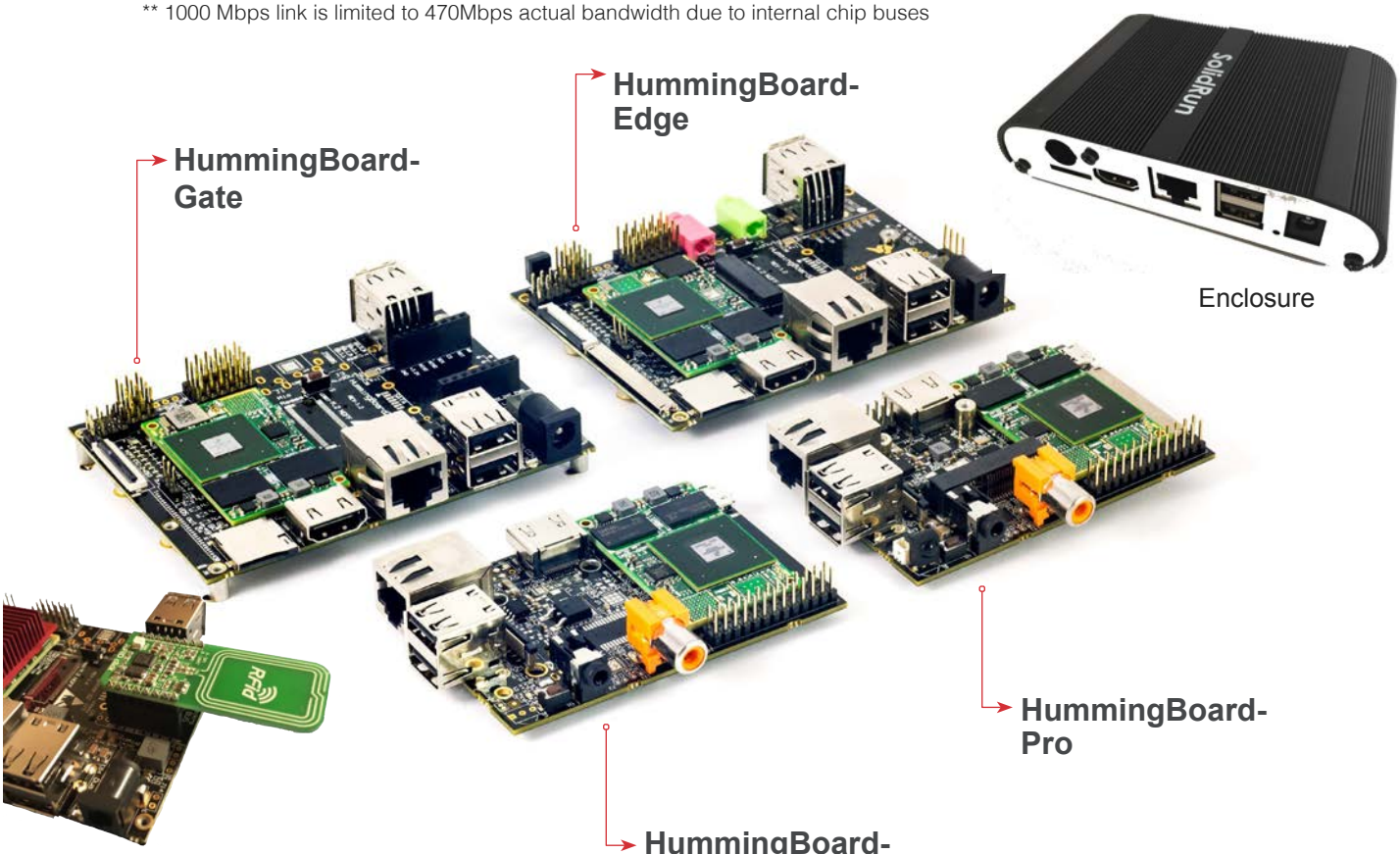
SolidRun's HummingBoard™ family:

HummingBoard-MX6

	HummingBoard-Edge	HummingBoard-Gate	HummingBoard-Pro	HummingBoard-Base
uSOM Model*	i.MX6 based Solo to Quad Core uSOM	i.MX6 based Solo to Quad Core uSOM	i.MX6 based Solo to Quad Core uSOM	i.MX6 based Solo to Dual Core uSOM
Memory and Storage	Up to 4GB DDR3 uSD eMMC M.2(2242)	Up to 4GB DDR3 uSD	Up to 4GB DDR3 uSD	Up to 2GB DDR3 uSD
Connectivity	1xRJ-45** 4xUSB2.0 mPCIE with SIM card holder	1*RJ-45** 4*USB2.0 mPCIE with SIM card holder	1xRJ-45** 2xHost USB 2.0	1xRJ-45** 2xHost USB 2.0
Media	HDMI-Out LVDS Analog Audio MIPI-CSI-2 and MIPI-DSI Parallel Camera (on GPIO header)	HDMI-Out MIPI-CSI-2 and MIPI-DSI Parallel Camera	HDMI-Out LVDS SPDIF Analog Audio MIPI- CSI-2 Camera	HDMI-Out SPDIF MIPI- CSI-2 Camera
I/O	Reset Button 36 pins GPIO Header RTC with Battery IR	Reset Button 36 pins GPIO Header RTC with Battery mikroBUS click interface	Reset Button 26 pins GPIO Header RTC IR	Reset Button 26 pins GPIO Header
Power	7V-36V, 5.5mm in	7V-36V, 5.5mm in	5V, uUSB	5V, uUSB
Dimensions	102mmx69mm	102mmx69mm	85mmx56mm	85mmx56mm
Software	Linux	Linux	Android, Linux	Android, Linux
Environment	Metal Enclosure (Optional)	Metal Enclosure (Optional)	-	-

* Supported with SoM i2eX and above

** 1000 Mbps link is limited to 470Mbps actual bandwidth due to internal chip buses

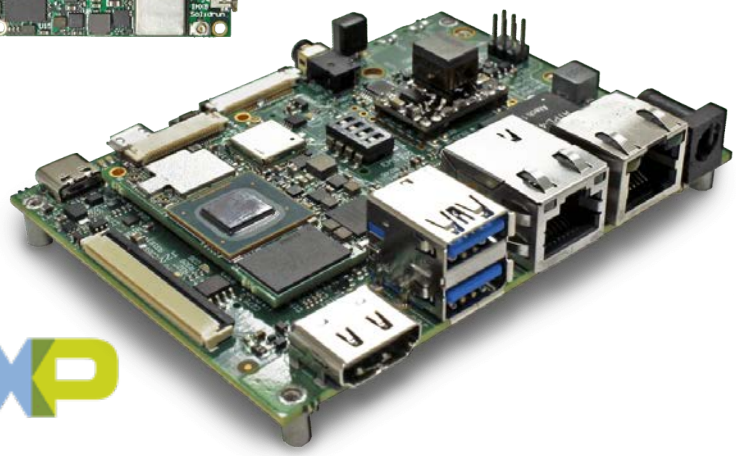


i.MX8 SOM

Tiny and compact - but packs a punch!

COMING SOON

SOM Model	SOM i.MX8 Dual | Quad Lite | Quad
Processor	i.MX8M Dual/Quad core ARM Cortex A53 up to 1.5Ghz (with ARM M4 GPP)
Memory and Storage	up to 4GB LPDDR4 MicroSD eMMC
Connectivity	2 x USB 3.0 1 x HDMI 2.0 1 x RJ45
I/O	Power on button Indication LEDs RTC IR receiver
OS Support	Linux Kernel 4.9, Android
Power	12V input DC jack PoE sink support
Dimensions	5 x 5 x 5cm
Enclosure	Cube shaped plastic enclosure



PetapicoShop(英徳社)は、SolidRun社の正規パートナー社となっております。法人様向けのODM/OEM案件もお取次ぎしております。Humming Boardの自社製品への組込み、さらにMicroSOM(SoCボード)の組込み利用についても対応しています。お気軽にpetapicoshop@petapico.biz へご相談・お問い合わせください。

Email: petapicoshop@petapico.biz
Shop: https://www.petapico.biz/