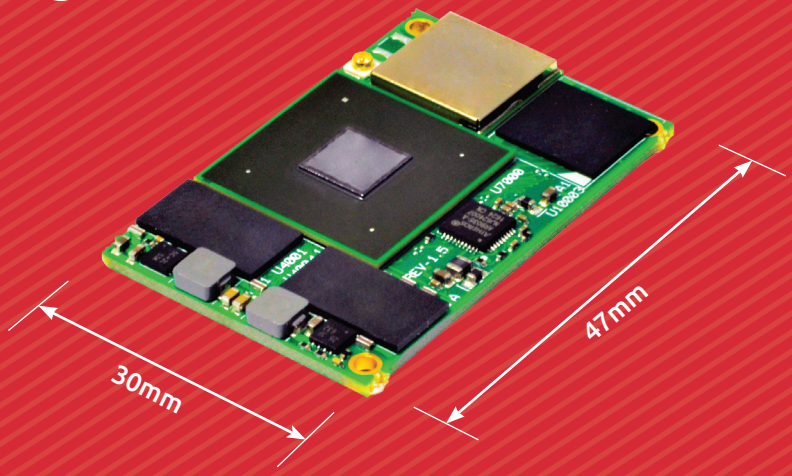
SolidRun
Make It Happen

SolidRun's SOM:

SR-SOM-MX6

(ARM-Cortex-A9)



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SolidRun's leading micro System on a Module (SOM) family is designed for embedded systems product developers and OEMs. SolidRun packed a Freescale i.MX6 SoC (System-on-Chip), memory subsystem, I/O and interconnect subsystems into a single ultra-compact system-on-module. The tightly packed Micro-SOM™, gives engineers a unique set of off-the-shelf design features and benefits. SolidRun's SR-SOM-MX6 delivers faster time to market, lower design cost, and reduces design risk.

SolidRun SR-uSOM-MX6 runs popular Operating Systems (Debian, Yocto etc).

> Reduces TTM, design risk & cost

> Gives a total design freedom

> The smallest SOM available today (30mm* 47mm)

> Lower costs

Product Design Advantages

- Reduce design risk
- Fast time to market
- Off-the-shelf components
- Wide processing range

Non-Intrusive SOM

- Enables compact products
- Core Element Module (CEM) Approach
- Minimize design constraints
- Seamless scalable design

Standard Compatibility Support

- ARM-Cortex-A9 with NEON
- Comprehensive I/O
- Linux support
- Wide application set

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	SOM i1	SOM i2	SOM i2eX	SOM i4Pro
System on Chip	i.MX6 Solo	i.MX6 Dual Lite	i.MX6 Dual	i.MX6 Quad
Core				
Processor Core	Single core ARM A9	Dual core ARM A9	Dual core ARM A9	Quad core ARM A9
Processor Speed	1GHz (up to 1.2GHz)	1GHz (up to 1.2GHz)	1GHz (up to 1.2GHz)	1GHz (up to 1.2GHz)
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|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	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
Connectivity (PHY on Module)				
Wired Network	10/100/1000 Mbps*	10/100/1000 Mbps*	10/100/1000 Mbps*	10/100/1000 Mbps*
Wireless Network	Optional (WL1831)	Optional (WL1831)	Optional (WL1831)	Optional (WL1831)
Bluetooth	Optional (WL1831)	Optional (WL1831)	Optional (WL1831)	Optional (WL1831)
I/O Expansion (IC/Connector on Carrier)				
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)
Display Interfaces	LVDS, HDMI 1.4, DSI, Parallel	LVDS, HDMI 1.4, DSI, Parallel	LVDS, HDMI 1.4, DSI, Parallel	LVDS, HDMI 1.4, DSI, Parallel
Dual Display Support	✓	✓	✓	✓
Supported External Storage	NOR-Flash, eMMC, SD/microSD, PCIe SSD	NOR-Flash, eMMC, SD/microSD, PCIe SSD	NOR-Flash, eMMC, mSATA, SD/microSD, PCIe SSD	NOR-Flash, eMMC, mSATA, SD/microSD, PCIe SSD
Supported Internal Storage	eMMC, SPI ROM (Optional)	eMMC, SPI ROM (Optional)	eMMC, SPI ROM (Optional)	eMMC, SPI ROM (Optional)
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 CSI	2 Lane CSI	4 Lane CSI	4 Lane CSI
CAN Bus	✓	✓	✓	✓
S-ATA	✗	✗	Gen II, 3Gbps	Gen II, 3Gbps
PCI-Express 2.0	×1	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	✓	✓	✓	✓
RTC	On Carrier	On Carrier	On Carrier	On Carrier
OS Support				
Linux	✓	✓	✓	✓
Mechanical and Electronic Specifications				
Temperature Range	Commercial Extended Industrial	Commercial Extended Industrial	Commercial Extended Industrial	Commercial Extended Industrial
Main Voltage	5V	5V	5V	5V
IO Voltage	3.3V	3.3V	3.3V	3.3V
SOM Interface	Hirose DF40 connectors 1.5mm up to 4.0mm mating height	Hirose DF40 connectors 1.5mm up to 4.0mm mating height	Hirose DF40 connectors 1.5mm up to 4.0mm mating height	Hirose DF40 connectors 1.5mm up to 4.0mm mating height
Dimensions (W x L)	47mm x 30mm	47mm x 30mm	47mm x 30mm	47mm x 30mm

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