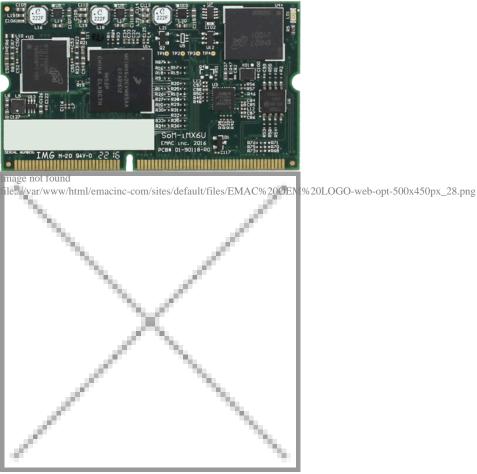


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## SoM-IMX6U System on Module



Freescale/NXP i.MX6 UltraLite Cortex A7 528Mhz Processor

Ultra Low-Power consumption

3.5mA APM Sleep, or less.

4 GB of eMMC Flash

16 MB of Serial Data Flash

128 MB of LP DDR2 RAM

4x serial port with no handshake

1x serial ports with handshake

1x 10/100 BaseT Ethernet port

1x USB 2.0 High Speed Host port

1x USB 2.0 High Speed Host/Device OTG port

4x channels of 12 bit A/D (0 to 3.3V)

22x GPIO (3.3V) Lines (Shared with Timer/Counters, Prog Clocks, PWM, 12S, etc.)  Ix CAN Port  Ix IZC Port  Small, form factor (2.66° x 1.5")  External Reset Button provision and green Status (software controlled) LED  Ix SDIO SD port  +3.3 volt board input voltage required  Temperature Range: -40 to +85C  Rolls 2 (2011) compliance  Designed and manufactured in the USA, the SnM-iMX6U is an ultra low power System on Module (SnM) designed to plug into an EMAC currier board that contains all the connectors and 10 required for a system. The SoM-iMX6U is based on the Freescale/NXP iMX6 Ultrafale Cortex A7 processor and has ARM Sleep Mode of 3.5mA.  A SoM is a small embedded module that contains the core of a microprocessor system. The SoM-iMX6U is industrial wide temperature ultra-low power 528 MHz module with 4Gft 6r eMMC Flash, 8MB of serial data flash, and 512MB of LP DDR2 RAM. The module has 10100 BaseT bitherna, 5x serial ports (dx without handshake and 1x with handshake). The recommended development / currier board is the SnM-112 or SoM-150 carrier board.  The SoM approach allows cherts to develop a product using a commercial off the shelf (COTS) development/basehuant/currier board for the proof of concept or production units. If the product or project has specific dimensional, I/O or connector placement requirements a custom earrier board can be created in as little as a month. Use of an off-the-shelf carrier board allows clients to start developing their board allows clients to the created in as little as a month. Use of an off-the-shelf carrier board allows clients to start developing their board allows clients to start developing their board allows clients to a start developing their board allows clients to start developing their board allows clients to start developing their board allows clients to develop and the soft the product of project has specific dimensional, I/O or connector placement requirements are substanced and build. Using the SoM approach, product lifecycle concerns for the processor memory	External Address/Data Bus
Ix E2C Port  Small, form factor (2.66° x 1.5°)  External Reset Button provision and green Status (software controlled) LED  Ix SDIO SD port  13.3 volt board input voltage required  Temperature Range: 40 to +85C  RoHS 2 (2011) compliance  Designed and manufactured in the USA, the SoM-iMX6U is an ultra low power System on Module (SoM) designed to plug into an EMAC carrier board that contains all the connectors and I/O required for a system. The SoM-iMX6U is based on the Freescale/NXP iMX6U UltraLite Cortex A7 processor and has ARM Sleep Mode of 3.5mA.  A SoM is a small embedded module that contains the core of a microprocessor system. The SoM-iMX6U is industrial wide temperature ultra-low power 528 MHz module with 4GB of eMMC Flush, 8MB of serial data flush, and 512MB of I.P DDR2 RAM. The module had 10/100 BaseT Eithernet, 5x serial ports (4x without handshake and 1x with handshake). The recommended development / carrier board is the SoM-112 or SoM-150 carrier board.  The SoM approach allows clients to develop a product using a commercial off the shelf (COTS) development/baseboard/carrier board for the proof concept or production units. If the product or project has specific dimensional, I/O or connector placement requirement software while the custom carrier board is being designed and build. Using the SoM approach, product lifecycle concerns for the processor memory and other SoM based components are minimized.  The System On Module approach provides the Desibility of a fully customized product at a greatly reduced cost.  Specifications  SOM Type:  Microcontroller SODIMM Modules.  Phrecessor  Freescale/NXP i-MX6 UltraLite (MCIMX6G1) Cortex A7 Processor  Clock Speed:  Libror Clock:  Bands and the series of the	22x GPIO (3.3V) Lines (Shared with Timer/Counters, Prog Clocks, PWM, I2S, etc.)
External Reset Button provision and green Status (software controlled) LED  Ix SDIO SD port  13.3 volt board input voltage required  Temperature Range: 40 to +85C  RoHS 2 (2011) compliance  Designed and manufactured in the USA, the SoM-iMX6U is an ultra low power System on Module (SoM) designed to plug into an EMAC carrier board that contains all the connectors and I/O required for a system. The SoM-iMX6U is based on the Freescale/NXP i.MX6U Ultral.tic Cortex A7 processor and has ARM Sleep Mode of 3.5mA.  A SoM is a small embedded module that contains the core of a microprocessor system. The SoM-iMX6U is industrial wide temperature ultra-low power \$28 MHz module with 46B of eMMC Flash, 8MB of serial data flash, and \$12MB of LP DDR2 RAM. The module has 10100 BaseT Ethernet, 5x serial ports (4x without handshake and 1x with handshake). The recommended development / carrier board is the SoM-112 or SoM-150 carrier board.  The SoM approach allows clients to develop a product using a commercial off the shelf (COTS) development/baseboard/carrier board for the proof of concept or production units. If the product or project has specific dimensional, I/O or connector placement requirements a custom carrier board carrier board is his designed and build. Using the SoM approach, product lifecycle concerns for the processor memory and other SoM based components are minimized.  The System On Module approach provides the flexibility of a fully customized product at a greatly reduced cost.  Specifications  SOM Type:  Microcontroller SODIMM Modules  Processor:  Processor:  Processor:  Processor:  RM Processor:  Som Clock Specifications  SOM Hz.  Real Time Clock:  Marmayy  Based:  Marmayy  Based:  Marmayy  Based:  Marmayy  Ramay Flash:	1x CAN Port
External Reset Button provision and green Status (software controlled) LED  1x SDIO SD port  +3.3 volt board input voltage required  Temperature Range: -40 to +85C  Rol1S 2 (2011) compliance  Designed and manufactured in the USA, the SoM-iMX6U is an ultra low power System on Module (SoM) designed to plug into an EMAC carrier board that contains all the connectors and I/O required for a system. The SoM-iMX6U is based on the Freescale/NXP i.MX6U UltraLite Cortex A7 processor and has ARM Sleep Mode of 3.5mA.  A SoM is a small embedded module that contains the core of a microprocessor system. The SoM-iMX6U is industrial wide temperature ultra-low power 528 MHz module with 4GB of eMMC Flash, 8MB of serial data flash, and 512MB of LP DDR2 RAM. The module has 101/00 BaseT Ethernet, 5x serial ports (4x without handshake and 1x with handshake). The recommended development / carrier board is the SoM-112 or SoM-150 carrier board.  The SoM approach allows clients to develop a product using a commercial off the shelf (COTS) development/baseboard/carrier board for the proof of concept or production units. If the product or project has specific dimensional, I/O or connector placement requirements a custom carrier board can be created in as little as a month. Use of an off-the-shelf earrier board allows clients to start devloping theis software while the custom carrier board is a little as a month. Use of an off-the-shelf earrier board ultra-low clients to start devloping theis software while the custom carrier board is a little as a month. Use of an off-the-shelf earrier board allows clients to start devloping theis software while the custom carrier board is a little as a month. Use of an off-the-shelf earrier board allows clients to start devloping theis software while the custom carrier board is here.  The System On Module approach provides the flexibility of a fully customized product at a greatly reduced cost.  Specifications  SOM Type:  Microcontroller SODIMM Modules  Processor.  Processor.  Processor.  Solved Product at	1x I2C Port
Temperature Range: -40 to +85C  RoHS 2 (2011) compliance  Designed and manufactured in the USA, the SoM-iMX6U is an ultra low power System on Module (SoM) designed to plug into an EMAC carrier board that contains all the connectors and I/O required for a system. The SoM-iMX6U is based on the Freescale/NXP i.MXc UltraLite Cortex A7 processor and has ARM Sleep Mode of 3.5mA.  A SoM is a small embedded module that contains the core of a microprocessor system. The SoM-iMX6U is industrial wide temperature ultra-low power 528 MHz module with 4GB of eMMC Flash, 8MB of serial data flash, and 512MB of LP DDR2 RAM. The module has 10/100 BaseT Ethernet, 5x serial ports (4x without handshake and 1x with handshake). The recommended development/carrier board is the SoM-112 or SoM-150 carrier board.  The SoM approach allows clients to develop a product using a commercial off the shelf (COTS) development/basehoard/carrier board for the proof of concept or production units. If the product or project has specific dimensional, I/O or connector placement requirements a custom carrier board can be created in as little as a month. Use of an off-the-shelf carrier board allows clients to start devloping their software while the custom carrier board is being designed and build. Using the SoM approach, product lifecycle concerns for the processor memory and other SoM based components are minimized.  The System On Module approach provides the flexibility of a fully customized product at a greatly reduced cost.  Specifications  SOM Type:  Microcontroller SODIMM Modules  Ph. Processor  Freescale/NXP i.MX6 UltraLite (MCIMX6G1) Cortex A7 Processor  Clock Speed:  528 MHz  Real Time Clock:  P. Memory  Primary Flash:	Small, form factor (2.66" x 1.5")
Hand the proof of concept or production units. If the product or project has specific dimensional, I/O or connector placement requirements a custom carrier board allows clients to develop a product using a commercial off the shelf (COTS) development/baseboard/carrier board based can be created in as little as a month. Use of an off-the-shelf carrier board allows clients to start devloping their software while the custom carrier board provides the flexibility of a fully customized product at a greatly reduced cost.  Specifications  SOM Type:  Memory, Plash:  Memory, Flash:	External Reset Button provision and green Status (software controlled) LED
Temperature Range: -40 to +85C  RoHS 2 (2011) compliance  Designed and manufactured in the USA, the SoM-iMX6U is an ultra low power System on Module (SoM) designed to plug into an EMAC carrier board that contains all the connectors and I/O required for a system. The SoM-iMX6U is based on the Freescale/NXP i.MX6 UltraLite Cortex A7 processor and has ARM Sleep Mode of 3.5mA.  A SoM is a small embedded module that contains the core of a microprocessor system. The SoM-iMX6U is industrial wide temperature ultra-low power 528 MHz module with 4GB of eMMC Flash, 8MB of serial data flash, and 512MB of LP DDR2 RAM. The module has 10/100 BaseT Ethernet, 5x serial ports (4x without handshake and 1x with handshake). The recommended development / carrier board is the SoM-112 or SoM-150 carrier board.  The SoM approach allows clients to develop a product using a commercial off the shelf (COTS) development/baseboard/carrier board for the proof of concept or production units. If the product or project has specific dimensional, I/O or connector placement requirements a custom carrier board can be created in as little as a month. Use of an off-the-shelf carrier board allows clients to start devloping their software while the custom carrier board is being designed and build. Using the SoM approach, product lifecycle concerns for the processor memory and other SoM based components are minimized.  The System On Module approach provides the flexibility of a fully customized product at a greatly reduced cost.  Specifications SOM Type: Microcontroller SODIMM Modules  Processor Processor Processor Processor Processor Processor Processor Processor APP in MX6 UltraLite (MCIMX6G1) Cortex A7 Processor Clock Spect:  528 MHz Real Time Clock:  B. Memory Processor Processor Processor Processor Processor Processor Processor Clock Spect:	1x SDIO SD port
Designed and manufactured in the USA, the SoM-iMX6U is an ultra low power System on Module (SoM) designed to plug into an EMAC carrier board that contains all the connectors and I/O required for a system. The SoM-iMX6U is based on the Freescale/NXP i.MX6U UltraLite Cortex A7 processor and has ARM Sleep Mode of 3.5mA.  A SoM is a small embedded module that contains the core of a microprocessor system. The SoM-iMX6U is industrial wide temperature ultra-low power 528 MHz module with 4GB of eMMC Flash, 8MB of serial data flash, and 512MB of LP DDR2 RAM. The module has 10/100 BaseT Ethernet, 5x serial ports (4x without handshake and 1x with handshake). The recommended development / carrier board is the SoM-112 or SoM-150 carrier board.  The SoM approach allows clients to develop a product using a commercial off the shelf (COTS) development/baseboard/carrier board for the proof of concept or production units. If the product or project has specific dimensional, I/O or connector placement requirements a custom carrier board can be created in as little as a month. Use of an off-the-shelf carrier board allows clients to start devloping their software while the custom carrier board is being designed and build. Using the SoM approach, product lifecycle concerns for the processor memory and other SoM based components are minimized.  The System On Module approach provides the flexibility of a fully customized product at a greatly reduced cost.  Specifications  SOM Type:  Microcontroller SODIMM Modules  Processor  Processor  Freescale/NXP i.MX6 UltraLite (MCIMX6G1) Cortex A7 Processor  Clock Speed:  \$28 MHz  Real Time Clock:  B. Memory  John M	+3.3 volt board input voltage required
Designed and manufactured in the USA, the SoM-iMX6U is an ultra low power System on Module (SoM) designed to plug into an EMAC carrier board that contains all the connectors and I/O required for a system. The SoM-iMX6U is based on the Freescale/NXP i.MX6U UltraLite Cortex A7 processor and has ARM Sleep Mode of 3.5mA.  A SoM is a small embedded module that contains the core of a microprocessor system. The SoM-iMX6U is industrial wide temperature ultra-low power 528 MHz module with 4GB of eMMC Flash, 8MB of serial data flash, and 512MB of LP DDR2 RAM. The module has 10/100 BaseT Ethernet, 5x serial ports (4x without handshake and 1x with handshake). The recommended development / carrier board is the SoM-112 or SoM-150 carrier board.  The SoM approach allows clients to develop a product using a commercial off the shelf (COTS) development/baseboard/carrier board for the proof of concept or production units. If the product or project has specific dimensional, I/O or connector placement requirements a custom carrier board can be created in as little as a month. Use of an off-the-shelf carrier board allows clients to start devloping their software while the custom carrier board is being designed and build. Using the SoM approach, product lifecycle concerns for the processor memory and other SoM based components are minimized.  The System On Module approach provides the flexibility of a fully customized product at a greatly reduced cost.  Specifications  SOM Type:  Microcontroller SODIMM Modules  Processor  Processor  Processor  Processor  Treescale/NXP i.MX6 UltraLite (MCIMX6G1) Cortex A7 Processor  Clock Speed:  528 MHz  Real Time Clock:  B.Memory  Low Dod Joader:  Uboot  Primary Flash:	Temperature Range: -40 to +85C
carrier board that contains all the connectors and I/O required for a system. The SoM-iMX6U is based on the Freescale/NXP i.MX6UltraLite Cortex A7 processor and has ARM Sleep Mode of 3.5mA.  A SoM is a small embedded module that contains the core of a microprocessor system. The SoM-iMX6U is industrial wide temperature ultra-low power 528 MHz module with 4GB of eMMC Flash, 8MB of serial data flash, and 512MB of LP DDR2 RAM. The module has 10/100 BaseT Ethernet, 5x serial ports (4x without handshake and 1x with handshake). The recommended development / carrier board is the SoM-112 or SoM-150 carrier board.  The SoM approach allows clients to develop a product using a commercial off the shelf (COTS) development/baseboard/carrier board for the proof of concept or production units. If the product or project has specific dimensional, I/O or connector placement requirements a custom carrier board can be created in as little as a month. Use of an off-the-shelf carrier board allows clients to start devloping their software while the custom carrier board is being designed and build. Using the SoM approach, product lifecycle concerns for the processor memory and other SoM based components are minimized.  The System On Module approach provides the flexibility of a fully customized product at a greatly reduced cost.  Specifications  SOM Type:  Microcontroller SODIMM Modules  Processor  Freescale/NXP i.MX6 UltraLite (MCIMX6G1) Cortex A7 Processor  Clock Speed:  528 MHz  Real Time Clock:  Breenry  Breenry  Breenry  Hearty	RoHS 2 (2011) compliance
ultra-low power 528 MHz module with 4GB of eMMC Flash, 8MB of serial data flash, and 512MB of LP DDR2 RAM. The module has 10/100 BaseT Ethernet, 5x serial ports (4x without handshake and 1x with handshake). The recommended development / carrier board is the SoM-112 or SoM-150 carrier board.  The SoM approach allows clients to develop a product using a commercial off the shelf (COTS) development/baseboard/carrier board for the proof of concept or production units. If the product or project has specific dimensional, I/O or connector placement requirements a custom carrier board can be created in as little as a month. Use of an off-the-shelf carrier board allows clients to start devloping their software while the custom carrier board is being designed and build. Using the SoM approach, product lifecycle concerns for the processor memory and other SoM based components are minimized.  The System On Module approach provides the flexibility of a fully customized product at a greatly reduced cost.  Specifications  SOM Type: Microcontroller SODIMM Modules  Processor  Freescale/NXP i.MX6 UltraLite (MCIMX6G1) Cortex A7 Processor  Clock Speed:  528 MHz  Real Time Clock:  Broon Processor  Broon Processor  Broon Processor  Broon Processor  Broon Processor  Broon Processor  Clock Speed:  Som Memory  Broon Processor  Broon Processor  Clock Speed:  Som Memory  Broon Processor  Broon Processor  Broon Processor  Clock Speed:  Som Memory  Broon Processor  Clock Speed:  Som Proces	carrier board that contains all the connectors and I/O required for a system. The SoM-iMX6U is based on the Freescale/NXP i.MX6
the proof of concept or production units. If the product or project has specific dimensional, I/O or connector placement requirements a custom carrier board can be created in as little as a month. Use of an off-the-shelf carrier board allows clients to start devloping their software while the custom carrier board is being designed and build. Using the SoM approach, product lifecycle concerns for the processor memory and other SoM based components are minimized.  The System On Module approach provides the flexibility of a fully customized product at a greatly reduced cost.  Specifications  SOM Type:  Microcontroller SODIMM Modules  Processor  Freescale/NXP i.MX6 UltraLite (MCIMX6G1) Cortex A7 Processor  Clock Speed: 528 MHz  Real Time Clock:  Memory  Brown Journal of the product of an off-the-shelf carrier board allows clients to start devloping their developing	ultra-low power 528 MHz module with 4GB of eMMC Flash, 8MB of serial data flash, and 512MB of LP DDR2 RAM. The module has 10/100 BaseT Ethernet, 5x serial ports (4x without handshake and 1x with handshake). The recommended development / carrier board is the
Specifications  SOM Type:  Microcontroller SODIMM Modules  Processor  Freescale/NXP i.MX6 UltraLite (MCIMX6G1) Cortex A7 Processor  Clock Speed: 528 MHz  Real Time Clock:  Memory  Brook Book Book Book Book Book Book Book	the proof of concept or production units. If the product or project has specific dimensional, I/O or connector placement requirements a custom carrier board can be created in as little as a month. Use of an off-the-shelf carrier board allows clients to start devloping their software while the custom carrier board is being designed and build. Using the SoM approach, product lifecycle concerns for the processor
SOM Type: Microcontroller SODIMM Modules  Processor  Freescale/NXP i.MX6 UltraLite (MCIMX6G1) Cortex A7 Processor  Clock Speed: 528 MHz  Real Time Clock:  Memory  Brood Brood Brood Brood  Brood Brood  Brood Brood  Primary Flash:	The System On Module approach provides the flexibility of a fully customized product at a greatly reduced cost.
Freescale/NXP i.MX6 UltraLite (MCIMX6G1) Cortex A7 Processor Clock Speed: 528 MHz Real Time Clock:  Memory Doorloader: Uboot Primary Flash:	SOM Type:
Uboot Primary Flash:	Freescale/NXP i.MX6 UltraLite (MCIMX6G1) Cortex A7 Processor Clock Speed: 528 MHz
	Uboot Primary Flash:

Internal Real time clock/calendar (with external battery backup)

16MB of Serial Data Flash
Memory Misc.:
Other Memory sizes Build to order
Primary I/O
Primary I/O
22 GPIO (3.3V) Lines (Shared with Timer/Counters
Prog Clocks
PWM
2S
etc.)
SDIO:
1x SDIO SD Port
Disk Interface:
1x SD Flash Card Socket
SPI:
1x SPI
Audio:
1x I2S Audio Port with Line In/Out
Ethernet:
1x 100 BaseT Ethernet
USB:
2x USB 2.0 Hosts & 1 USB OTG
Serial Ports:
5x Serial Ports
2C:
1x I2C hardware port
Watchdog:
Secondary I/O
Ix CAN port
Γimers/ Counters/ PWM:
2 Timer/Counters/PWM
LPT Port:
Keypad:
PS/2:
Analog on
A/D Channels:
1
A/D Resolution:
12
D/A:
Dimensions Dimensions.
$2.66 \times 1.5$ in
Form Factor:
144-pin SODIMM
Power Requirements

Secondary Flash:

3.3 V

160 mA
Max Boot Current:
270 mA
Power Misc.:
APM Sleep Mode of 3.5mA, Low power, High-performance SOM
Environmental Low Operating Temperature:
-40 C
High Operating Temperature:
85 C
Upper Operating Humidity:
90%
Environmental Misc.:
Operating temperature of -40° to +85°C optional
Pricing SCIVI-11VIA 6U-120
SOM-IMX6U, MCIMX6G1, 128MB RAM, 4GB eMMC, 16MB Serial Data Flash, 2x USB, 10/100 LAN, (-40° to 85°C)
\$115.00
Stock
Order:
0
Parent Product:
SoM-IMX6U
Base Product:
SoM-IMX6U
SOM-IMX6U-140
SOM-IMX6U, MCIMX6G1, 512MB RAM, 4GB eMMC, 16MB Serial Data Flash, 2x USB, 10/100 LAN, (-40° to 85°C)
\$115.00
Build to Order
Order:
0
Parent Product:
SoM-IMX6U
Base Product:
SoM-IMX6U
Non-Stock NCNR:
0
Carrier Boards:
SOM-112ES-100R
Standard version (does not have WiFi, Audio or multi-I/O options)
\$165.00
Base Product:
SOM-112ES
SOM-112ES-131R
Deluxe version with multi-I/O, wifi, audio
\$195.00

Sleep Current:

Typical Current:

3.5 mA Idle Current: 150 mA

SOM-112ES
SoM-150ES-000
Standard Carrier Board
\$150.00
Base Product:
SoM-150ES
SoM-150ES-007
Bare-Bones Carrier Board
\$100.00
Base Product:
SoM-150ES
SoM-150ES-030
Standard Carrier Board with A/D, D/A
\$190.00
Base Product:
SoM-150ES

Base Product:

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