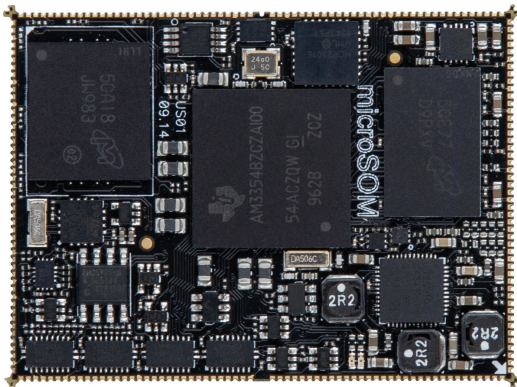


# microSOM uS01

Exor embedded is presenting uS01, TI's Sitara ARM-Cortex - A8 based microSOM standard, for the increased system performance requirements. The ARM Cortex - A8 allows greater flexibility for the system designers and helps to lower the system cost and power consumption.



The microSOM is very compact smart System On Module and makes easier to design a new generation of products such as Controller and HMI products with simple carrier board design.

The microSOM includes Exor JMobile and Linux runtime, designed to optimize the performance and the memory size, running the Embedded Linux on ARM-Cortex - A8 platform and programmed by JMobile Studio, using optional CODESYS 3.x development tool for SoftPLC control applications.

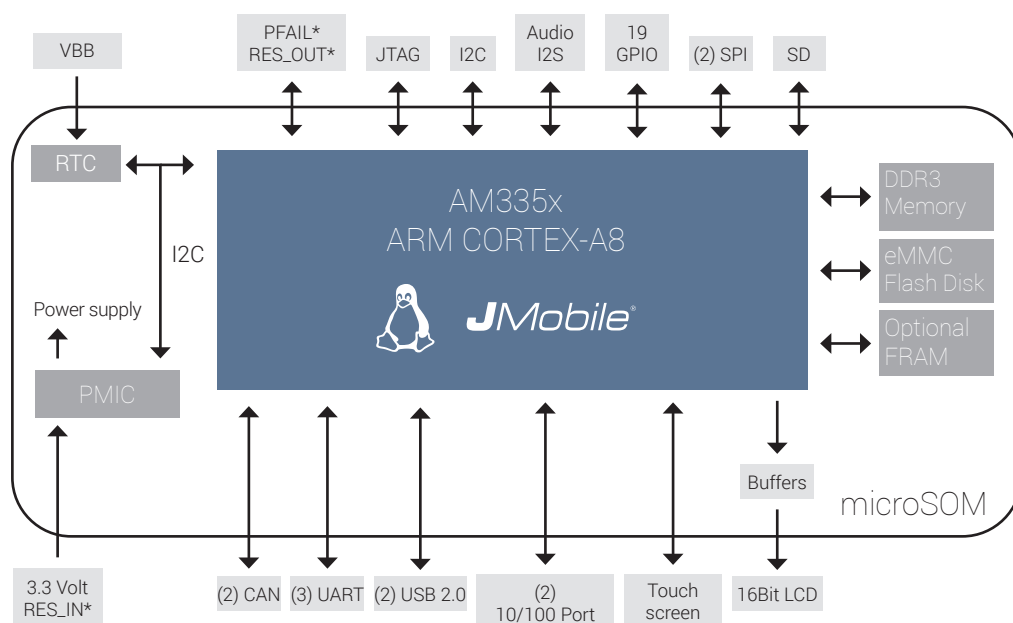
## Highlights

- The microSOM is soldered directly onto the main carrier board, without using expensive connectors, that will increase reliability of the system.
- With only 46x35 and 4 mm in height microSOM allows you to design products extremely compact and ultra-slim.
- The microSOM requires a single supply of 3.3V with very low power consumption
- It provides the combination of peripherals for performance and power savings, but with the great flexibility allows to configure different products.
- A Powerful Video Controller and JMobile HMI software enable to design a User-friendly and high quality vectorial graphic (SVG) rich-graphical GUI and assure a device connectivity with suite of +200 communication protocols.
- Optional IEC 61131-3 CODESYS 3.x for Control I/O
- Linux RTOS solution (OSADL real time option)

# Technical Data

Dimensions	46x35 mm
Temperature Range	-40°C to +85°C
CPU	TI Sitara AM3352/AM3354 up 1 GHz
DDR	Up 512 Mbytes DDR3
Flash Disk	Up to 4 Gbytes eMMC
EEPROM	4 Kbits
FRAM	64-Kbytes (optional)
Watchdog/RTC/Voltage monitor/JTAG	Yes
USB	2 (Host V2.0)
Ethernet	2 (port 0 - 10/100, port 1 - 10/100)
SD	1
Serial Port	3
SPI	2
I2C	1 (shared with SPI)
CAN	2*
Audio	1 (I2S Channel)
Video	1 (Video Out Controller 16 Bit)
Analog Input	5
GPIO	19

Software configurable. Not all selections can be combined



+US01-0001 - Industrial Range	
CPU	AM3354 1GHz
DDR	512 MBytes
FLASH DISK	4 GBytes
FRAM	No
AUDIO	Shared resource
+US01-0002 - Industrial Range	
CPU	AM3352 300MHz
DDR	256 MBytes
FLASH DISK	2 GBytes
FRAM	No
AUDIO	No
+US01-0003 - Commercial Range	
CPU	AM3354 1GHz
DDR	512 MBytes
FLASH DISK	4 GBytes
FRAM	No
AUDIO	Shared resource
+US01-0004 - Commercial Range	
CPU	AM3352 300MHz
DDR	256 MBytes
FLASH DISK	2 GBytes
FRAM	No
AUDIO	No

## Deliverables:

Linux BSP 3.1x  
 JMobile Studio and runtime  
 Optional 3S CODESYS-IEC 61131-3  
 User Manual and Application notes reference design for microSOM integration  
 microSOM Evaluation Kit

## Main Applications:

- Factory Automation
- Building & Home Automation
- Marine Automation
- Mobile Industry
- Transportation e-Vehicle
- Medical
- Vending Systems & Kiosk
- Energy Smart Systems
- Embedded Industry

# Ordering Information

Part Number	Description
+US01-0004	TI Sitara AM3352 - 300Mhz - Operating temperature 0 to +70°C
+US01-0003	TI Sitara - AM3354 - 1Ghz - Operating temperature 0 to +70°C
+US01-0002	TI Sitara - AM3352 300Mhz - Operating temperature -40 to +85°C
+US01-0001	TI Sitara - AM3354 - 1Ghz - Operating temperature -40 to +85°C

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