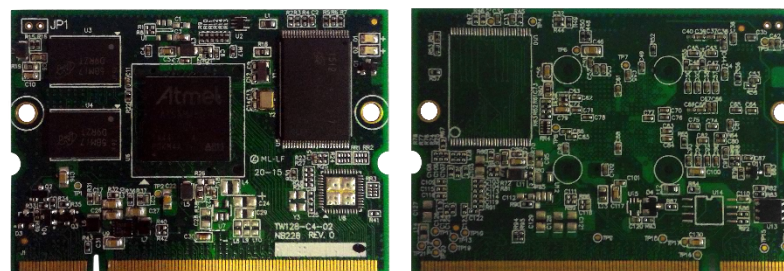


Low power SODIMM-200 based on Atmel® SAMA5D3 Cortex®-A5 CPU.

Features

- Compact size
- Industrial and commercial operating temperatures available
- Different sizes for Flash & RAM memory are available
- On board Ethernet PHY
- Only a single 3.3V supply required
- Optimized for low cost



Applications

- Power metering and smart grid
- Connected devices
- Human Machine Interfaces – control panels
- **EVB - Carrier board for SOM module available**

Support

- BSP provided by Atmel® and Linux4SAM Community (Yocto)
- Virtual machine for easy set-up of environment and system image
- **Software and hardware integration services**

Technical specifications					
Model available	99.0228.0001	99.0228.0002	99.0228.0003	99.0228.0004	99.0228.0005
CPU	ATSAMA5D31	ATSAMA5D31	ATSAMA5D31	ATSAMA5D31	ATSAMA5D31
Architecture	Atmel® SAMA5D3 Cortex®-A5 CPU				
RAM	256MB Option Up to 1024MB				
FLASH ROM	256MiB Option Up to 2048MiB				
Serial FLASH	Optional				
NOR FLASH	Optional				
On-board Gigabit PHY	No	No	No	Optional	Optional
Clock speed	536 Mhz				
LEDs	Two status LEDs				

Operating T° (industrial range)	-40°C +85°C				
dimension	25.5 x 65.5mm				
Module Power					
Required power	3V3 (optional RTC backup voltage)				
Current and power	Theoretical Maximum 1200mA with all peripherals active – 4W (not fully characterized)				
MPU Peripherals					
UART	6	4	4	6	6
CAN	None	None	2	2	2
I2C	2	2	2	2	2
SPI	2	2	2	2	2
USB Host	1	1	1	1	1
USB Device	1	1	1	1	1
TFT Controller	24 bit RGB	24 bit RGB	24 bit RGB	None	24 bit RGB
Gigabit MAC Controller	None	1 (used by optional onboard PHY)			
Memory Card Host	2	2	2	2	2
3 channel Timer/counter	1	1	1	2	2
4 channel PWM	1	1	1	1	1
12 channel ADC	1	1	1	1	1
JTAG	Available on DIMM pads				

Refer to datasheet and application manual for proper pin multiplexing: above peripherals may share physical I/O.
When booting from SD/MMC controller MMC1 cannot be used as a boot media.

These specifications are subject to change without notice, and they are valid unless errors or omissions.
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IT.0228.0001 flyer NB228SOM module R0.

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