

TEXAS INSTRUMENTS "Sitara" AM335x CPU MODULE

- Texas Instruments AM335x Cortex-A8 processors family
- LITE Line - ARM Cortex-A8 architecture @ up to 1000 MHz
- NEON Multimedia Coprocessor and PowerVR® SGX Graphics Engine
- Dual Programmable Real-Time Unit and Industrial Communication Subsystem (PRU-ICSS)
- Crypto Hardware Accelerator (AES, SHA, PKA, RNG)
- SO-DIMM 204-pin form factor
- Rich interfaces set including Dual CAN and Ethernet
- Wide range PSU 3.6V-5.5V Evaluation Board available with exhaustive Development Kit



DIVA is a ready-to-use CPU module by DAVE Embedded Systems, based on Texas Instruments Cortex-A8 application processor from AM335x (Sitara) family.

DIVA is the top product of DAVE Embedded Systems' LITE Line.

DAVE Embedded Systems proposes at the customer an high flexibility using an ARM cortex -A8 scalable from 300 MHz to 1GHz.

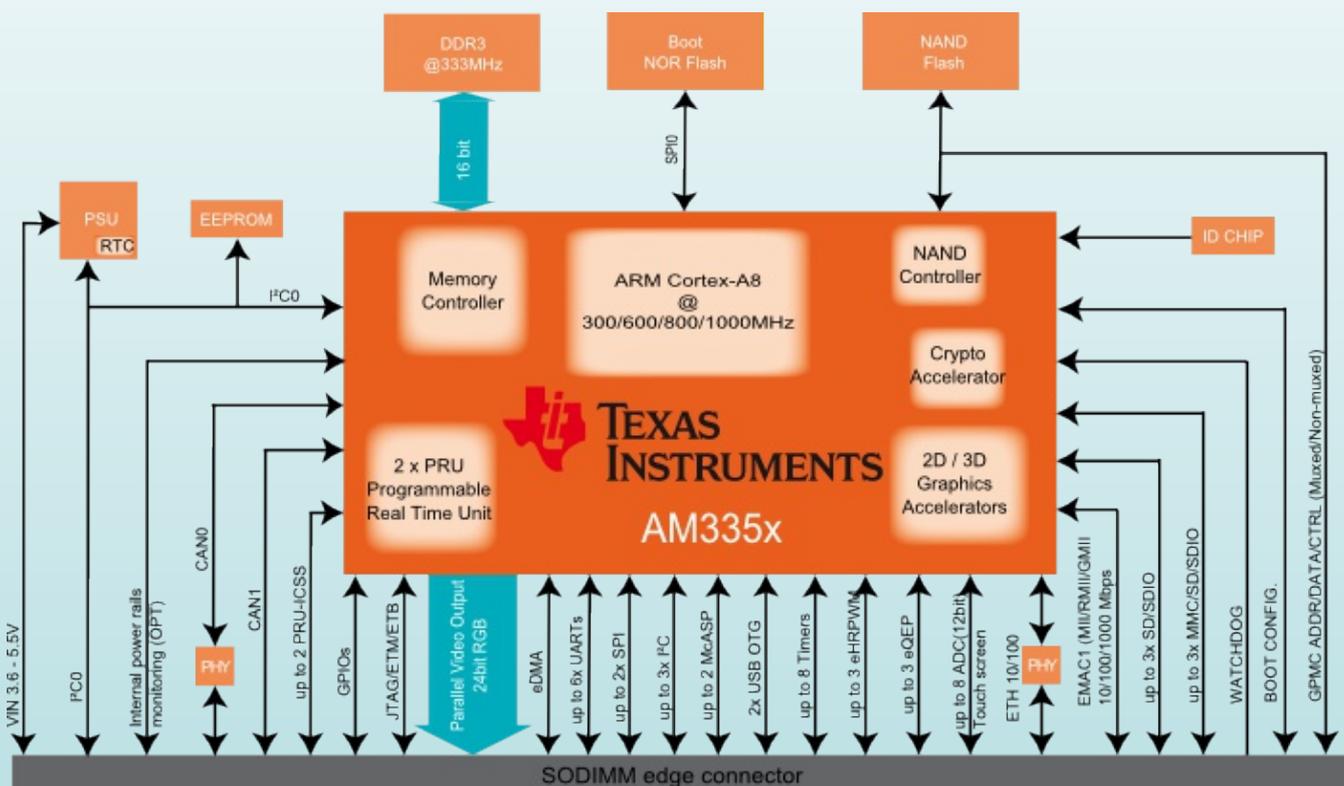
This processor offers feature high processing performance, low power, lots of graphics, processing, peripherals and industrial interface options, allowing customer to implement cost-effective designs.

The dual Programmable Real-Time Unit and Industrial Communication Subsystem (PRU-ICSS) adds further flexibility and enables additional peripherals interfaces and real-time protocols such us EtherCAT, Profinet, Ethernet/IP, Profibus, Ethernet Powerlink.

The wide range PSU 3.6V- 5.5V enables designers to create smart products suitable for harsh mechanical and thermal environments, allowing for the development of high computing and reliable solutions. DIVA is designed in order to keep full compatibility with the LITE Line CPU modules where quality and reliability are important factors.

AM335x provides Cryptographic Acceleration, which operates separately from the CPU core: all the cryptographic processing is offloaded from the ARM core to distinct security hardware accelerators, reducing the overall computational load and letting the CPU focus on user interface, graphics, the WiFi wireless communications stack and most software application.

DIVA is suitable for high volume applications where the price/quality ratio is important such as Home Automation, portable solutions, Human Machine Interfaces and Industrial Automation, Profibus, EtherCAT slaves, moreover Medical applications (thanks to the internal voltage feature).



CPU	Texas Instruments AM335x ARMv7 architecture Cortex A8 @ up to 1000 MHz
Coprocessor	NEON Media Technology (Advanced SIMD coprocessor) PowerVR SGX 530 3D Graphics Accelerator Up to 20 Mpoly/s, support for OpenGL ES 1.1/2.0 and OpenVG 1.0.1 Crypto Hardware Accelerator (AES, SHA, PKA, RNG)
Supervisor	On board power supply supervision and power sequencer Watchdog and RTC

Memory	
Cache	L1: 32Kbyte instruction, 32Kbyte data L2: Unified data/instruction, 512 KByte
SDRAM	Up to 512MB DDR3 @ 333MHz
NOR	Bootable SPI NOR 16, 32 MB
NAND	All sizes, on request
SRAM	64 KByte
EEPROM	Yes

Interfaces (full-spec models) *	
LAN	Ethernet 10/100 Mbps (PHY on board) Additional MII/RMII/RGMII Interface
UART	up to 6x UART ports
CAN	2x CAN controller (version 2 part A, B)
USB	Up to 2x 2.0 OTG ports
PRU	Up to 2x Programmable Real-Time Units (PRU-ICSS)
SDIO	Up to 3 x SD/MMC card
Audio	Up to 2x McASP interface
Video Output	24-bit, up to 2048x2048 LCD controller TFT/RGB
Debug	JTAG IEEE 1149.1 Test Access Port ETB port EMU port
Other	Up to 3x I ² C channels Up to 2x SPI channels GPIOs available Up to 8x 12-bit ADC channels

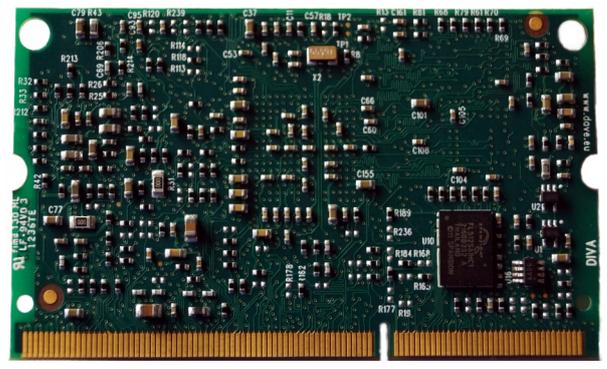
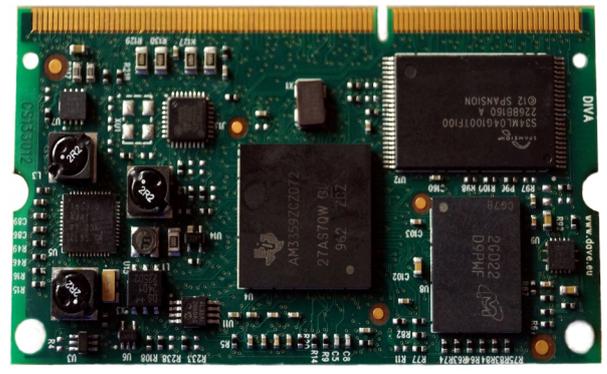
Mechanical	
Connectors	204-pin SO-DIMM
Size	67.5 mm x 38.3 mm
Temperature	Commercial (0°C / +70°C) temperature range Industrial (-40°C / +85°C) temperature range

PSU	
Input	3.6 - 5.5V, voltage regulation on board

Software	
Bootloader	U-Boot
Multitasking	Linux 3.12.xx

Evaluation Kit
DIVA evaluation kit is available in a development kit that includes a SOM, a carrier board and all accessories required for immediate start-up.

*: interface availability depends on pin multiplexing.
Please contact your local FAE.



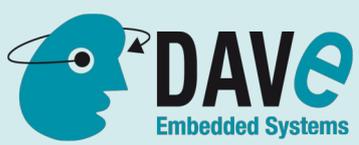
Product code configurator *

Family	Processor	NOR flash	DDR RAM	NAND flash	[FIX]	Temp. range
DD	A: AM3352 300Mhz	0: No NOR	7: 128MB	0: No NAND	22**	I: -40 / +85°C
	B: AM3354 600Mhz	4: 16MB	8: 256MB	7: 128MB		Industrial temp.
	C: AM3352 1Ghz	5: 32MB	9: 512MB	8: 256MB		C: 0 / 70°C
	D: AM3356 600Mhz	6: 64MB		9: 512MB		Commercial temp.
	F: AM3359 800Mhz			1: 1GB		
	G: AM3352 600Mhz			2: 2GB		
	H: AM3354 1Ghz					

** Standard configuration. For further information, please contact your local FAE



© 2014 DAVE S.r.l.
All trademarks and registered trademarks are the property of their respective owners.
All features and specifications subject to change without notice.



DAVE S.r.l.
Via Talponedo, 29/A
33080 Porcia (PN) - ITALY
Ph +390434921215
Fax +3904341994030

www.dave.eu
wiki.dave.eu
sales@dave.eu
support-diva@dave.eu



Стандарт Электрон Связь

Мы молодая и активно развивающаяся компания в области поставок электронных компонентов. Мы поставляем электронные компоненты отечественного и импортного производства напрямую от производителей и с крупнейших складов мира.

Благодаря сотрудничеству с мировыми поставщиками мы осуществляем комплексные и плановые поставки широчайшего спектра электронных компонентов.

Собственная эффективная логистика и склад в обеспечивает надежную поставку продукции в точно указанные сроки по всей России.

Мы осуществляем техническую поддержку нашим клиентам и предпродажную проверку качества продукции. На все поставляемые продукты мы предоставляем гарантию .

Осуществляем поставки продукции под контролем ВП МО РФ на предприятия военно-промышленного комплекса России , а также работаем в рамках 275 ФЗ с открытием отдельных счетов в уполномоченном банке. Система менеджмента качества компании соответствует требованиям ГОСТ ISO 9001.

Минимальные сроки поставки, гибкие цены, неограниченный ассортимент и индивидуальный подход к клиентам являются основой для выстраивания долгосрочного и эффективного сотрудничества с предприятиями радиоэлектронной промышленности, предприятиями ВПК и научно-исследовательскими институтами России.

С нами вы становитесь еще успешнее!

Наши контакты:

Телефон: +7 812 627 14 35

Электронная почта: sales@st-electron.ru

Адрес: 198099, Санкт-Петербург,
Промышленная ул, дом № 19, литера Н,
помещение 100-Н Офис 331