

AT76C713

USB BRIDGE CONTROLLER

A powerful 8-bit microcontroller that enables bridging of USB to various types of devices.



- Based on Atmel's AVR® RISC Architecture, 130 Powerful Instructions
- Clock Generator Provides CPU Rates Up to 48 MHz
- One External Clock Crystal of 12 MHz Generates All the Required System Clocks
- Full-speed USB Interface (12 Mbits/s) 2.0 Compliant
- Two On-chip 16550 UARTs, Each Supporting Baud Rates Up to 921 Kbaud
- On-chip Bootstrap ROM Provides a Variety of Firmware Upgrade Modes
- Programmable SPI Interface
- JTAG (IEEE Std. 1149.1 Compliant) Interface for Program Code Debug
- 8 Kbytes x 16 bits (Up to 11 Kbytes x 16 bits), In-System SRAM for Program Code (Program Memory)
- On-chip 8 Kbytes SRAM
- DMA Channels Allow Fast Data Transfers between End Point Buffers and Internal or External SRAM
- Two 8-bit Timer/Counters and One 16-bit Timer/Counter
- Four External Interrupts through GPIOs
- Programmable Watchdog Timer
- Low-voltage operation: 1.8V Core, 3.3V I/O



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Literature Requests

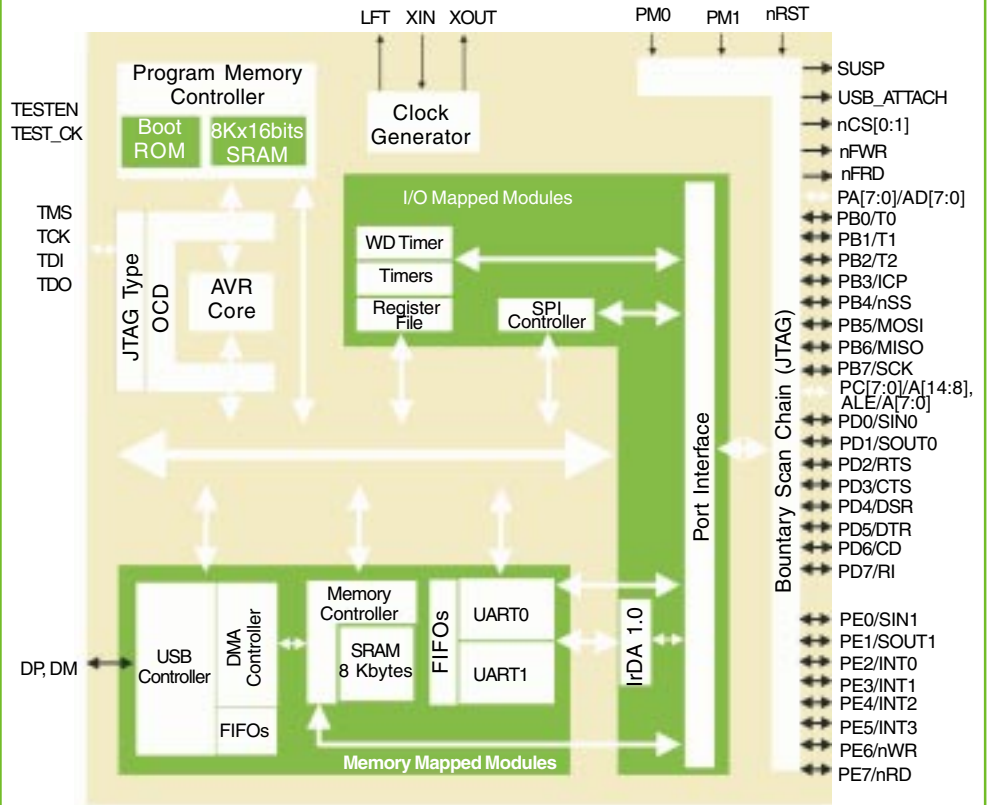
www.atmel.com/literature



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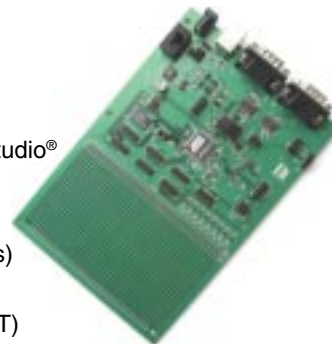
The Atmel AT76C713 is a powerful USB peripheral device that can connect various types of devices to a common USB port. It is supported with a full suite of program and system development tools including: C-compiler, macro assemblers, program debugger/simulators, in-circuit emulators, development kits, etc.



AT76C713 Block Diagram

Development Kit

- Development board
- User guide
- Programmer guide
- Supported by the AVR Studio® Development suite
- Software (AVR Studio and programming utilities)
- Sample of user application (USB to UART)
- Reference design (schematics, gerber, and BOM)



AT76C713-DK Board

Applications

- USB-to-Serial (RS-232, RS-422 and RS-485) converters
- USB data cable for mobile phones and PDAs
- USB bar code readers
- USB chargers

USB	SPI	UART(s)	JTAG	Development Tools	EK	DK	Package
√	√	2	√	√	-	√	100-pin TQFP

Maximum Operating Temperature: -40°C to 85°C
Maximum Operating Voltage: 3.6V