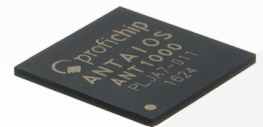
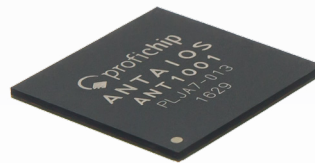
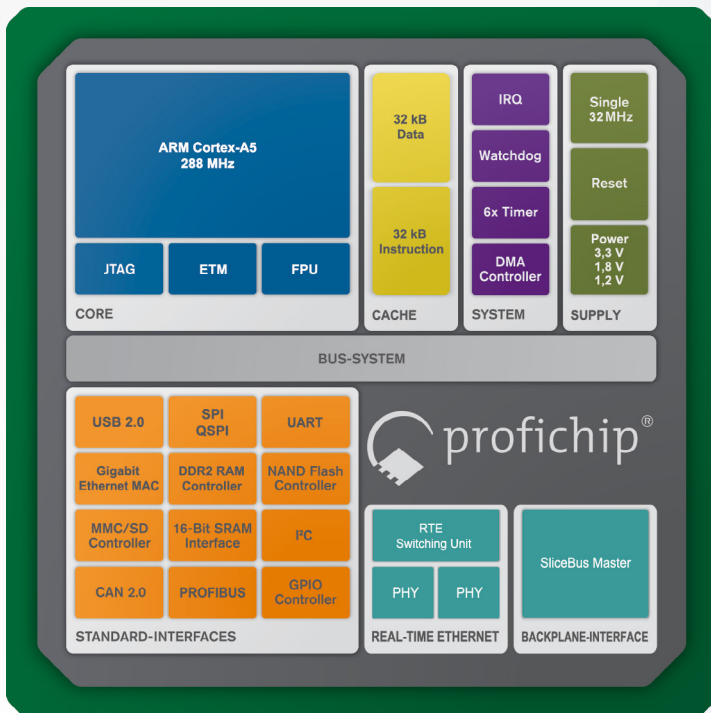


Real-Time Ethernet Communication Controller

ANTAIOS

**NEW
PRODUCT**



Discover new ways ...

- Multiple fieldbus support
- 288 MHz ARM Cortex-A5 Processor
- Ethernet interface with real-time switch
- Gigabit Ethernet MAC
- SliceBus-Master

... to industrial communication

ARM Cortex-A5 Core

- 288 MHz clock speed
- 64 Bit Floating Point Unit
- Little-endian Byte ordering
- 32/32 kByte instruction/data cache
- Debug Interfaces: JTAG, ETM, ETB, ITM

Advanced Real-Time Ethernet Switch

- 3 port switch
(2 external Ethernet + 1 internal)
- Integrated PHYs
- Programmable switch
- Microcode and software stack based implementation for
 - PROFINET IO-Device RT/IRT
 - EtherCAT Slave
 - Mechatrolink-III Master/Slave
 - EtherNet/IP Adapter*
 - Other Ethernet protocols on demand

Classic fieldbus options

- PROFIBUS Master x2 (12 Mbit/s)
 - Protocols: DP-V0, DP-V1/V2
- PROFIBUS Slave (12 Mbit/s)
 - Protocols: DP-V0, DP-V1/V2
- CAN Controller x2 (1 Mbit/s)

Fieldbus options and stacks

- Licensed with ANTAIOS
 - PROFIBUS Slave DP-V0
 - PROFINET IO-Device RT/IRT library
 - EtherCAT Slave
- Purchasing stacks (source codes)
 - PROFIBUS Slave DP-V1/V2
 - PROFIBUS Master
 - PROFINET IO-Device RT/IRT
 - PROFINET IO-Controller RT/IRT *
 - Mechatrolink-III Master/Slave
 - CANopen
 - Others on demand

*Under development

Standard Interfaces

- USB 2.0 Device Controller (480 Mbit/s)
- UART x2 (12 Mbit/s)
- Gigabit Ethernet MAC
(supports 10/100/1000 Mbit/s modes)
- SPI Channel
 - Master Mode with 80 Mbit/s
 - Slave Mode with 24 Mbit/s
- QSPI Channel Master 384 Mbit/s
- SRAM Interface
 - Master configurable 8 Bit/16 Bit
 - Slave 16 Bit
- I²C x2

SliceBus-Master controller

- Backplane or local bus communication
- Local single Master for I/O-Modules
- Up to 64 nodes
- High speed 48 Mbit/s
- Alarm and error handling

Memory Interfaces

- MMC/SD Card Controller
- NAND Flash Controller 8 Bit
- DDR2 RAM 16 Bit Controller (max. 800 MByte/s)

Other features

- DMA Controller (8 channels)
- IRQ Controller (8 priority levels)
- Watchdog
- Six independent 32 Bit timers with prescaler
- Technology Function Module (TechIO)
 - Max. 26 In / 20 Out (shared pins)
 - Configurable digital input filter
 - Counter 4 channels
 - Valuation for incremental encoders
 - PWM 4 channels
 - SSI 2 encoder interfaces

Package

- TFBGA380: 15x15 mm², 0.65 mm pitch
- TFBGA385: 19x19 mm², 0.80 mm pitch



Any Questions? Give us a call

We like to support you. Profichip is not only a technology leader in industrial fieldbus communication but also one of the big suppliers in system consulting.