#### XMC1100-T016F0032 AB

32KB Flash, 16KB RAM

Supply voltage range 1.8 - 5.5 V

4 x 16-bit timers

6 channel 12-bit ADC

2 channel USIC (configurable to SPI, UART, IIC, IIS)

Pseudo Random Number Gererator

Core frequency: 32[MHZ]

Peripherals clock: 64[MHZ]

Real Time Clock

Watch Dog Timer

PG-TSSOP-16

Temperature range: -40 - 85°C

A/D Input Lines (incl. FADC) 6

Additional Features Temp. Sensor

Budgetary Price €/1k 0.63

CAN Nodes 0

Clock Frequency max 32.0 MHz

DMA Channels0

DSP Functionality no

# Digital I/O Pins 14

EEPROM Emulation (Data-Flash) yes

External Bus Interface no

Fast Flash Programming no

FlexRayTM no

Floating Point Unit no

I/O Operation Voltages 5.5 V; 1.8 V

Instruction Set Architecture ARM® Cortex®-M0 (32-bit)

Instruction Width ([bits]) 32/16

Number of ADC Modules 1.0

On-chip Clock Generation yes

On-chip Voltage Regulator yes

Oscillator Watchdog yes

Peripheral Control Processor no

Power Mode clock gating possible

Program Memory 32.0 kByte

Qualification Industrial

Real Time Clock yes

SRAM (incl. Cache) 16.0 kByte

Serial I/O Interfaces 2

Temperature -40 to 85°C

Timed I/O Pins (PWM, CAPCOM) 4

Timer/Counter 4

Touch/LED Matrix Control no

Type of Memory Flash

Type of Serial I/O Interfaces UART; SPI; I<sup>2</sup>C; I<sup>2</sup>S

#### XMC1100-T016X0032 AB

32KB Flash, 16KB RAM

Supply voltage range 1.8 - 5.5 V

4 x 16-bit timers

6 channel 12-bit ADC

2 channel USIC (configurable to SPI, UART, IIC, IIS)

Pseudo Random Number Gererator

Core frequency: 32[MHZ]

Peripherals clock: 64[MHZ]

Real Time Clock

Watch Dog Timer

PG-TSSOP-16

Temperature range:-40 - 105°C

A/D Input Lines (incl. FADC) 6

Additional Features Temp. Sensor

Budgetary Price €/1k 0.68

CAN Nodes 0

Clock Frequency max 32.0 MHz

DMA Channels0

DSP Functionality no

### Digital I/O Pins 14

EEPROM Emulation (Data-Flash) yes

External Bus Interface no

Fast Flash Programming no

FlexRayTM no

Floating Point Unit no

I/O Operation Voltages 5.5 V; 1.8 V

Instruction Set Architecture ARM® Cortex®-M0 (32-bit)

Instruction Width ([bits]) 32/16

Number of ADC Modules 1.0

On-chip Clock Generation yes

On-chip Voltage Regulator yes

Oscillator Watchdog yes

Peripheral Control Processor no

Power Mode clock gating possible

Program Memory 32.0 kByte

Qualification Industrial

Real Time Clock yes

SRAM (incl. Cache) 16.0 kByte

Serial I/O Interfaces 2

Temperature -40 to 105°C

Timed I/O Pins (PWM, CAPCOM) 4

Timer/Counter 4

Touch/LED Matrix Control no

Type of Memory Flash

Type of Serial I/O Interfaces UART; SPI; I<sup>2</sup>C; I<sup>2</sup>S

#### XMC1202-T016X0032 AB

32KB Flash, 16KB RAM

Supply voltage range 1.8 - 5.5 V

4 x 16-bit timers

10 channel 12-bit ADC, 2 x parallel sampling

2 channel USIC (configurable to SPI, UART, IIC, IIS)

LED brightness & color control module (BCCU)

2 x Comparators

Core frequency: 32[MHZ]

Peripherals clock: 64[MHZ]

**Temperature Sensor** 

Pseudo Random Number Gererator

Real Time Clock

Watch Dog Timer

PG-TSSOP-16

Temperature range: -40 - 105°C

A/D Input Lines (incl. FADC) 6

Additional Features BCCU, 2x ACMP, Temp. Sensor

Budgetary Price €/1k 0.75

CAN Nodes 0

Clock Frequency max 32.0 MHz

DMA Channels0

DSP Functionality no

# Digital I/O Pins 14

EEPROM Emulation (Data-Flash) yes

External Bus Interface no

Fast Flash Programming no

FlexRayTM no

Floating Point Unit no

I/O Operation Voltages 1.8 V; 5.5 V

Instruction Set Architecture ARM® Cortex®-M0 (32-bit)

Instruction Width ([bits]) 32/16

Number of ADC Modules 2.0

On-chip Clock Generation yes

On-chip Voltage Regulator yes

Oscillator Watchdog yes

Peripheral Control Processor no

Power Mode clock gating possible

Program Memory 32.0 kByte

Qualification Industrial

Real Time Clock yes

SRAM (incl. Cache) 16.0 kByte

Serial I/O Interfaces 2

Temperature -40 to 105°C

Timed I/O Pins (PWM, CAPCOM) 11

Timer/Counter 4

Touch/LED Matrix Control no

Type of Memory Flash

Type of Serial I/O Interfaces UART; SPI; I<sup>2</sup>C; I<sup>2</sup>S

#### XMC1301-T016F0032 AB

32KB Flash, 16KB RAM

Supply voltage range: 1.8 - 5.5V

8 x 16-bit special purpose timers, dead time generation

Hall Sensor & Encoder I/F

12 channel 12-bit ADC, 2 x parallel sampling

2 channel USIC (configurable to SPI, UART, IIC, IIS)

2 x Comparators

Peripherals Clock: 64 [MHZ]

**Temperature Sensor** 

Pseudo Random Number Gererator

Real Time Clock

Watch Dog Timer

PG-TSSOP-16

Temperature range: -40 - 85°C

Analog comparators with only 3 mv input offset voltage and a propagation delay of 30 ns

A/D Input Lines (incl. FADC) 6

Additional Features Special purpose timer CCU8; POSIF; 2x ACMP; Temp. Sensor

Budgetary Price €/1k 0.68

Clock Frequency max 32.0 MHz

DMA Channels0

# Digital I/O Pins 14

EEPROM Emulation (Data-Flash) yes

External Bus Interface no

Fast Flash Programming no

FlexRayTM no

Floating Point Unit no

I/O Operation Voltages 1.8 V; 5.5 V

Instruction Set Architecture ARM® Cortex®-M0 (32-bit)

Instruction Width ([bits]) 32/16

Number of ADC Modules 2.0

On-chip Clock Generation yes

On-chip Voltage Regulator yes

Oscillator Watchdog yes

Peripheral Control Processor no

Power Mode clock gating possible

Program Memory 32.0 kByte

Qualification Industrial

Real Time Clock yes

SRAM (incl. Cache) 16.0 kByte

Serial I/O Interfaces 2

Timed I/O Pins (PWM, CAPCOM) 12

Timer/Counter 8

Touch/LED Matrix Control no

Type of Memory Flash

Type of Serial I/O Interfaces UART; SPI; I<sup>2</sup>C; I<sup>2</sup>S