



| Type | max. Clock Rate (MHz) | ROM (Byte) | ROM Protection | RAM (Byte) | I/O Lines (Inputs only) | ADC-Inputs/Resolution | Timer/Counter (16-Bit) | Interrupt vectors/Levels | Serial I/O | FCAN 2.0B active | USB 1.0 Interface | PWM | Mul./Div. Unit | Data Pointers (16-Bit) | Hardware Power Down | Watch-dog Timer | Osc Watch-dog | Packaging | |
|-------------------------------------------------------|-----------------------|----------------------|----------------|-------------|-------------------------|-----------------------|------------------------|--------------------------|-----------------|------------------|-------------------|-------|----------------|------------------------|---------------------|-----------------|---------------|-----------------------------------|---------------------------------------------------------------------|
| C501G-L / -1R C501G-E | 40 | - / 8 k 8 k OTP | ✓ | 256 | 32 | - | 3 | 6 / 2 | USART | - | - | - | - | 1 | - | - | - | P-DIP-40 P-LCC-44 P-MQFP-44 | Fully compatible with 80C52/C32 standard |
| C504-L / -2R C504-2E | 40 | - / 16 16 k OTP | ✓ | 512 | 32 | 8 / 10 | 4 | 12 / 2 | USART | - | - | 6-ch | - | 1 | - | ✓ | ✓ | P-MQFP-44 | CCU for DC motor control, Interrupt wakeable Power down |
| C511-R / C511A-R | 12 | 2,5 k / 4 k | - | 128 / 256 | 32 | - | 2 | 4 / 2 | SSC | - | - | - | - | 1 | - | - | - | P-LCC-44 | Low Power, Low EMI |
| C513-1R C513A-L / -R / -2R | 12 | 8 k - 12 k / 16 k | - | 256 512 | 32 | - | 3 | 7 / 2 | USART + SSC | - | - | - | - | 1 | - | - | - | P-DIP-40/P-LCC-44 P-MQFP-44 | Low Power Low EMI |
| C505L-4E | 20 ²⁾ | 32 k OTP | - | 512 | 46 | 8 / 10 | 3 | 12 / 4 | USART | - | - | 4-ch | - | 8 | - | ✓ | ✓ | P-MQFP-80 | LCD Driver on-chip 128 segments; RTC with 32 kHz subclock |
| C505-L / -2R | 20 ²⁾ | - / 16 k | ✓ | 512 | 34 | 8 / 8 | 3 | 12 / 4 | USART | - | - | 4-ch | - | 8 | - | ✓ | ✓ | P-MQFP-44 | Enhanced power saving modes; Low EMI, Interrupt wakeable Power down |
| C505C-L / -2R | 20 ²⁾ | - / 16 k | ✓ | 512 | 34 | 8 / 8 | 3 | 12 / 4 | USART | ✓ | - | 4-ch | - | 8 | - | ✓ | ✓ | P-MQFP-44 | Enhanced power saving modes; Low EMI, Interrupt wakeable Power down |
| C505A-4E | 20 ²⁾ | 32 k OTP | ✓ | 1280 | 34 | 8 / 8 | 3 | 12 / 4 | USART | - | - | 4-ch | - | 8 | - | ✓ | ✓ | P-MQFP-44 | Enhanced power saving modes; Low EMI, Interrupt wakeable Power down |
| C505CA-4E | 20 ²⁾ | 32 k OTP | ✓ | 1280 | 34 | 8 / 8 | 3 | 12 / 4 | USART | ✓ | - | 4-ch | - | 8 | - | ✓ | ✓ | P-MQFP-44 | Enhanced power saving modes; Low EMI, Interrupt wakeable Power down |
| C515-L / -1R | 24 | - / 8 k | ✓ | 256 | 56 (8) | Prog. REF 8 / 8 | 3 | 12 / 4 | USART | - | - | 4-ch | - | 1 | - | ✓ | ✓ | P-MQFP-80 | Compatible with SAB 80C515 |
| C515B-2R ¹⁾ C515A-L / -4R ¹⁾ | 24 | 16 k - / 32 k | ✓ | 512 1280 | 56 (8) | 8 / 10 | 3 | 12 / 4 | USART | - | - | 4-ch | - | 1 | ✓ | ✓ | ✓ | P-MQFP-80 | Compatible with SAB 80C515A |
| C515C-L / -8R C515C-8E | 10 ²⁾ | - / 64 k 64 k OTP | ✓ | 2304 | 57 (8) | 8 / 10 | 3 | 15 / 4 | USART + SSC | ✓ | - | 4-ch | - | 8 | ✓ | ✓ | ✓ | P-MQFP-80 | Low Power, Low EMI |
| C517A-L / 4R | 24 | - / 32 k | ✓ | 2304 | 68 (12) | 12 / 10 | 4 | 17 / 4 | USART + UART | - | - | 21-ch | ✓ | 8 | ✓ | ✓ | ✓ | P-MQFP-100 | Compatible with SAB 80C517A |
| C509-L | 16 ²⁾ | - | - | 3328 | 64 (15) | 15 / 10 | 5 | 19 / 4 | USART + UART | - | - | 29-ch | - | 8 | ✓ | ✓ | ✓ | P-MQFP-100 | CMOS/TTL Ports Bootstrap |
| C540U-E ¹⁾ | 12 ²⁾ | 4 k OTP | ✓ | 256 | 32 / 30 | - | 2 | 7 / 2 | - | - | HUBless | - | - | 1 | - | - | - | P-SDIP-52 / P-LCC-44 | USB-Transceiver-on-chip; |
| C541U-2E ¹⁾ | 12 ²⁾ | 8 k OTP | ✓ | 256 | 32 / 30 | - | 2 | 7 / 2 | SSC | - | HUBless | - | - | 1 | - | ✓ | ✓ | P-SDIP-52 / P-LCC-44 | USB-Transceiver-on-chip; |
| SAB 80C515 SAB 80C535 | 20 | 8 k - | ✓ - | 256 | 56 (8) | Prog. REF 8 / 8 | 3 | 12 / 4 | USART | - | - | 4-ch | - | 1 | - | ✓ | - | P-LCC-68 | |
| SAB 80C515A SAB 83C515A-5 | 18 | - 32 k | - ✓ | 1280 | 56 (8) | 8 / 10 | 3 | 12 / 4 | USART | - | - | 4-ch | - | 1 | ✓ | ✓ | ✓ | P-LCC-68 | |
| SAB 80C517 SAB 80C537 | 16 | 8 k - | ✓ - | 256 | 68 (12) | Prog. REF 12 / 8 | 4 | 14 / 4 | USART + UART | - | - | 21-ch | ✓ | 8 | - | ✓ | ✓ | P-LCC-84 | |
| SAB 80C517A SAB 83C517A-5 | 18 | - 32 k | - ✓ | 2304 | 68 (12) | 12 / 10 | 4 | 17 / 4 | USART + UART | - | - | 21-ch | ✓ | 8 | ✓ | ✓ | ✓ | P-LCC-84 | |

¹⁾ under development ²⁾ CPU-Clock

