The LPC1768 is a Cortex®-M3 microcontroller for embedded applications featuring a high level of integration and low power consumption at frequencies of 100 MHz. Features include 512 kB of flash memory, 64 kB of data memory, Ethernet MAC, USB Device/Host/OTG, 8-channel DMA controller, 4 UARTs, 2 CAN channels, 3 SSP/SPI, 3 I2C, I2S, 8-channel 12-bit ADC, 10-bit DAC, motor control PWM, Quadrature Encoder interface, 4 general purpose timers, 6-output general purpose PWM, ultra-low power Real-Time Clock with separate battery supply, and up to 70 general purpose I/O pins. The LPC1768 is pin-compatible to the 100-pin LPC2368 Arm7™ MCU.