

TX03 Series

32-bit / 100-pin

Under Development
Under Development

TMPM380FWFG
TMPM380FYFG

Under Development
Under Development

TMPM380FWDFG
TMPM380FYDFG



High-performance microcontrollers containing a multi-purpose timer for controlling the power devices used for home electronics, and realizing 5V single supply operation to achieve control over Induction Heating (IH) appliances and motors.

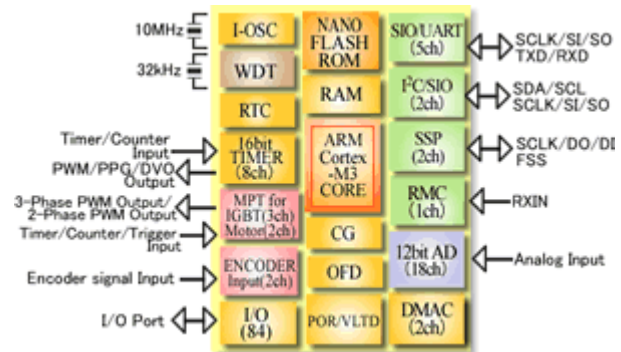
Features

ARM Cortex™-M3 CPU Core

- ▶ Operating voltage:
4.0 to 5.5 V
- ▶ Maximum operating frequency:
40 MHz (10 MHz × 4 by PLL)
- ▶ On-chip debug circuit
JTAG/SWD/SWV, TRACE (DATA2 bits)

Built-in Functions

- ▶ 12-bit AD converter: 2-μs conversion time, 18-channel.
- ▶ Multi-purpose timer (MPT): 3 channels (Note: 2channels for three-phase PWM)
Three-phase PWM output: Synchronous 3-channel PWM output (with AD conversion trigger)
IGBT control-timer: Synchronous 2-channel PPG output, external trigger start, dead-time output, protection circuit controls in emergency
- ▶ Encoder input : 2 channels
- ▶ 16-bit timer : 8 channels
- ▶ RTC : 1 channel
- ▶ SIO/UART : 5 channels
- ▶ I²C/SIO : 2 channels (1 channel is shared with SSP)
- ▶ SSP(SPI mode) : 2 channels (1 channel is shared with I²C/SIO.)
- ▶ Remote control signal preprocessor : 1 channel
- ▶ DMA controller : 2 channels
- ▶ Power-on reset circuit
- ▶ Voltage detection circuit
- ▶ Internal Oscillator (10 MHz)
- ▶ Oscillation frequency detector (only when external oscillator is used)



Flash Memory Size

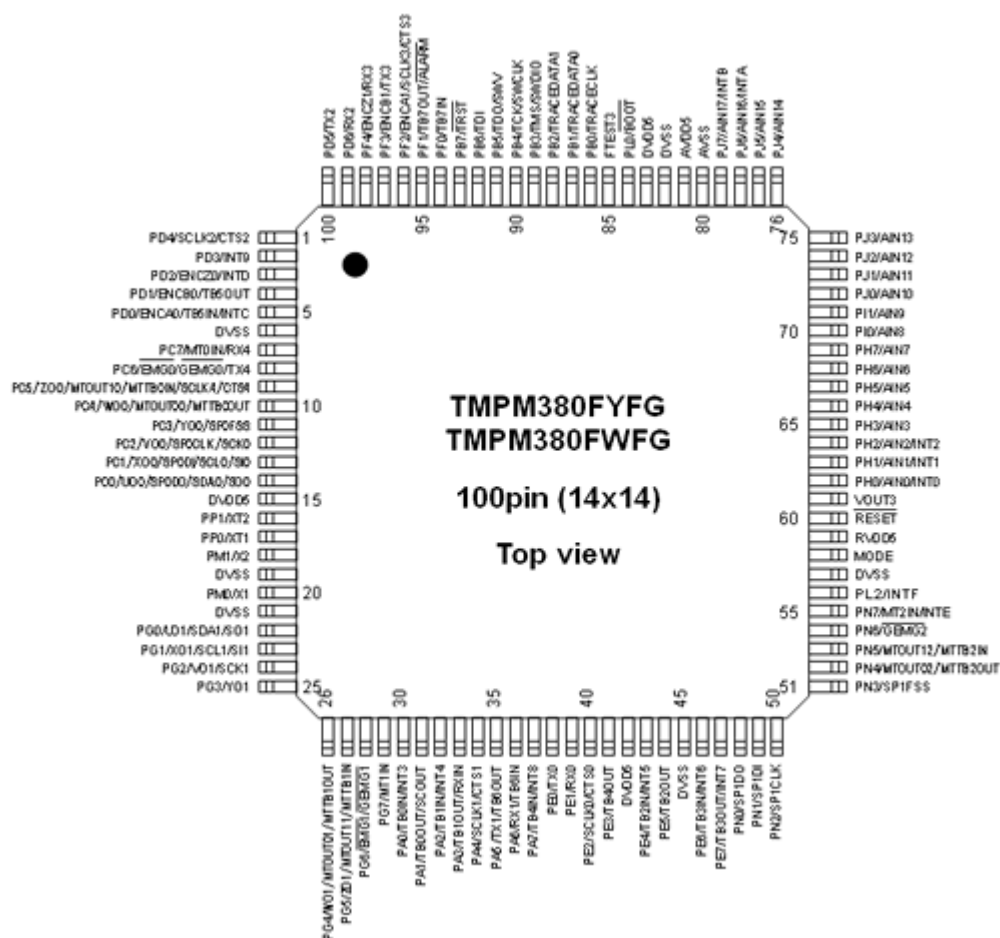
Part number	ROM (Flash)	RAM
TMPM380FWFG**	128 Kbytes	12 Kbytes
TMPM380FWDFG**	128 Kbytes	12 Kbytes
TMPM380FYFG**	256 Kbytes	16 Kbytes
TMPM380FYDFG**	256 Kbytes	16 Kbytes

** : Under development

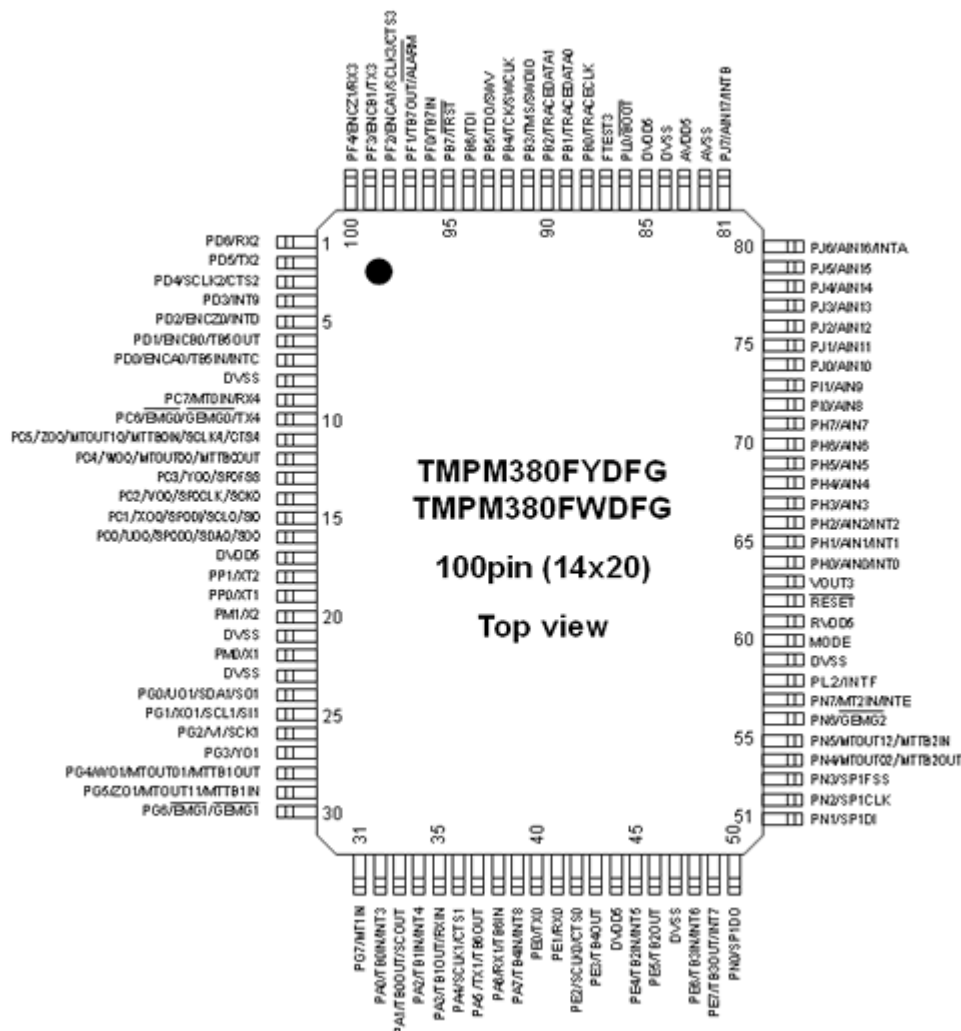
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Package Information

Pin Assignments



Package name: LQFP100-P-1414-0.50H



Package name: QFP100-P-1420-0.65Q

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