

Series name		TXZ+™4A Series	TX04 Series
Product group		M4K group(1)	M470 group
Part number		TMPM4K4FYBUG TMPM4K4FWBUG	TMPM471F10FG
		TMPM4K2FYBDUG TMPM4K2FWBDUG	
		TMPM4K1FYBUG TMPM4K1FWBUG	
CPU core		Arm Cortex-M4	Arm Cortex-M4
		– Memory protection unit (MPU)	– Memory protection unit (MPU)
		– Floating point unit (FPU)	– Floating point unit (FPU)
Maximum operating frequency		120MHz	160MHz
Internal oscillator		10MHz (±1%)	10MHz (±1%)
Internal memory	Code flash	128KB/256KB (Program/erase cycles: up to 100,000 times)	1024KB (Program/erase cycles: up to 100,000 times)
	Data flash	-	-
	RAM	18KB	64KB
I/O port		33 to 51 pins	81 pins
External interrupt		9 to 11 factors	16 factors
DMA controller (DMAC)		1 unit	1 unit
Timer function	32-bit timer event counter (T32A)	6 channels (12 channels if used as 16-bit timer)	5 channels (10 channels if used as 16-bit timer)
Communication function	Asynchronous serial communication circuit (UART)	3 to 4 channels	5 channels
	I ² C interface (I2C)	1 channel	-
	I ² C interface version A (EI2C)	1 channel	2 channels
	Serial peripheral interface (TSPI)	2 to 4 channels	4 channels
	CAN	-	-
Analog function	12-bit analog to digital converter (ADC)	2 units (Unit A: 9 to 12 inputs Unit B: 9 to 12 inputs)	2 units (Unit A: 12 inputs Unit B: 11 inputs)
	Operational amplifier (OPAMP)	1 unit	-
Other	Advanced encoder input circuit (32-bit) (A-ENC32)	2 channels	2 channels
Peripheral circuit	Advanced programmable motor control circuit (A-PMD)	1 to 2 channels	2 channels

	Advanced vector engine plus (A-VE+)	-	-
System function	Clock selective watchdog timer (SIWDT)	1 channel	1 channel
Debug interface		JTAG/SW, TRACE (4bit), NBDIF ^[3]	JTAG/SW, TRACE (4bit)
Operating voltage		2.7 to 5.5V, single voltage supply	4.5 to 5.5V, single voltage supply
Package/Pin		LQFP64 (10mm×10mm, 0.5mm pitch)	LQFP100 (14mm×14mm, 0.5mm pitch)
		LQFP48 (7mm×7mm, 0.5mm pitch)	
		LQFP44 (10mm×10mm, 0.8mm pitch)	