### **TX03** Series

32-bit / 100-pin

SCLK/SI/SO

SDA/SCL SCLK/SI/SO

I/O Port

MANO

# TMPM333FDFG TMPM333FYFG TMPM333FWFG

### High-performance microcontrollers based on ARM<sup>®</sup> Cortex<sup>®</sup>-M3 core, featuring a high-speed low-power FLASH-ROM, a 10-bit AD converter, various interfaces and timers.

### **Features**

### ARM<sup>®</sup> Cortex<sup>®</sup>-M3 CPU Core

- Operating voltage:2.7 to 3.6V
- Maximum Operating frequency: 40 MHz (10 MHz × 4 by PLL)
- High-speed Flash programming

#### **Built-in Functions**

- 10-bit AD converter (1.15µs) : 12 channels
- 16-bit timer : 10 channels
- SIO/UART : 3 channels
- I<sup>2</sup>C/SIO : 3 channels

#### **Flash Memory Size**

10MHz

32kHz

Timer/Counter Input

PPG Output

Analog Input

Part number	ROM (Flash)	RAM
TMPM333FDFG	512 Kbytes	32 Kbytes
TMPM333FYFG	256 Kbytes	16 Kbytes
TMPM333FWFG	128 Kbytes	8 Kbytes

WDT

RTC

16bit TIMER (10ch)

10bit AD (12ch) HS-NANC FLASH ROM

RAM

ARM Cortex -M3 CORE

CG

SIO/UART (3ch)

I<sup>2</sup>C/SIO (3ch)

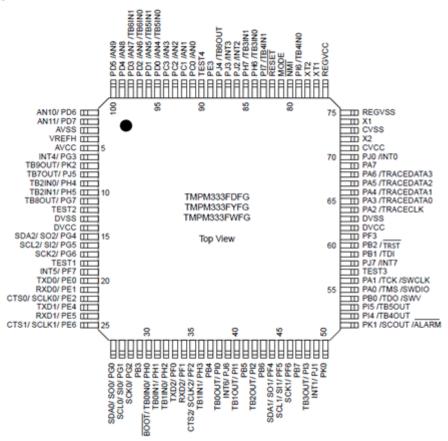
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\* NANO FLASH<sup>TM</sup> is a trademark of Toshiba Corporation.

### Package Information

### **Pin Assignments**





#### **Pin Numbers and Names**

Pin	Pin name	Pin	Pin name
No.		No.	
1	PD6, AN10	26	PG0, SO0, SDA0
2	PD7, AN11	27	PG1, SI0, SCL0
3	AVSS	28	PG2, SCK0
4	VREFH	29	PB3
5	AVCC	30	PH0, TB0IN0, BOOT
6	PG3, INT4	31	PH1, TB0IN1
7	PK2, TB9OUT	32	PH2, TB1IN0
8	PJ5, TB7OUT	33	PF0, TXD2
9	PH4, TB2IN0	34	PF1, RXD2
10	PH5, TB2IN1	35	PF2, SCLK2, CTS2
11	PG7, TB8OUT	36	PH3, TB1IN1
12	TEST2	37	PB4
13	DVSS	38	PI0, TB0OUT
14	DVCC	39	PJ6, INT6
15	PG4, SO2, SDA2	40	PI1, TB1OUT
16	PG5, SI2, SCL2	41	PB5
17	PG6, SCK2	42	PI2, TB2OUT
18	TEST1	43	PB6
19	PF7, INT5	44	PF4, SO1, SDA1
20	PE0, TXD0	45	PF5, SI1, SCL1
21	PE1, RXD0	46	PF6, SCK1
22	PE2, SCLK0, CTS0	47	PB7
23	PE4, TXD1	48	PI3, TB3OUT
24	PE5, RXD1	49	PJ1, INT1
25	PE6, SCLK1, CTS1	50	PK0,

Pin	Pin name	Pin	Pin name
No.		No.	
51	PK1, SCOUT, ALARM	76	REGVCC
52	PI4, TB4OUT	77	XT1
53	PI5, TB5OUT	78	XT2
54	PB0, TDO, SWV	79	PI6, TB4IN0
55	PA0, TMS, SWDIO	80	NMI
56	PA1, TCK, SWCLK	81	MODE
57	TEST3	82	RESET
58	PJ7, INT7	83	PI7, TB4IN1
59	PB1, TDI	84	PH6, TB3IN0
60	PB2, TRST	85	PH7, TB3IN1
61	PF3	86	PJ2, INT2
62	DVCC	87	PJ3, INT3
63	DVSS	88	PJ4, TB6OUT
64	PA2, TRACECLK	89	PE3
65	PA3, TRACEDATA0	90	TEST4
66	PA4, TRACEDATA1	91	PC0, AN0
67	PA5, TRACEDATA2	92	PC1, AN1
68	PA6, TRACEDATA3	93	PC2, AN2
69	PA7	94	PC3, AN3
70	PJ0, INTO	95	PD0, AN4, TB5IN0
71	CVCC	96	PD1, AN5, TB5IN1
72	X2	97	PD2, AN6, TB6IN0
73	CVSS	98	PD3, AN7, TB6IN1
74	X1	99	PD4, AN8
75	REGVSS	100	PD5, AN9

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