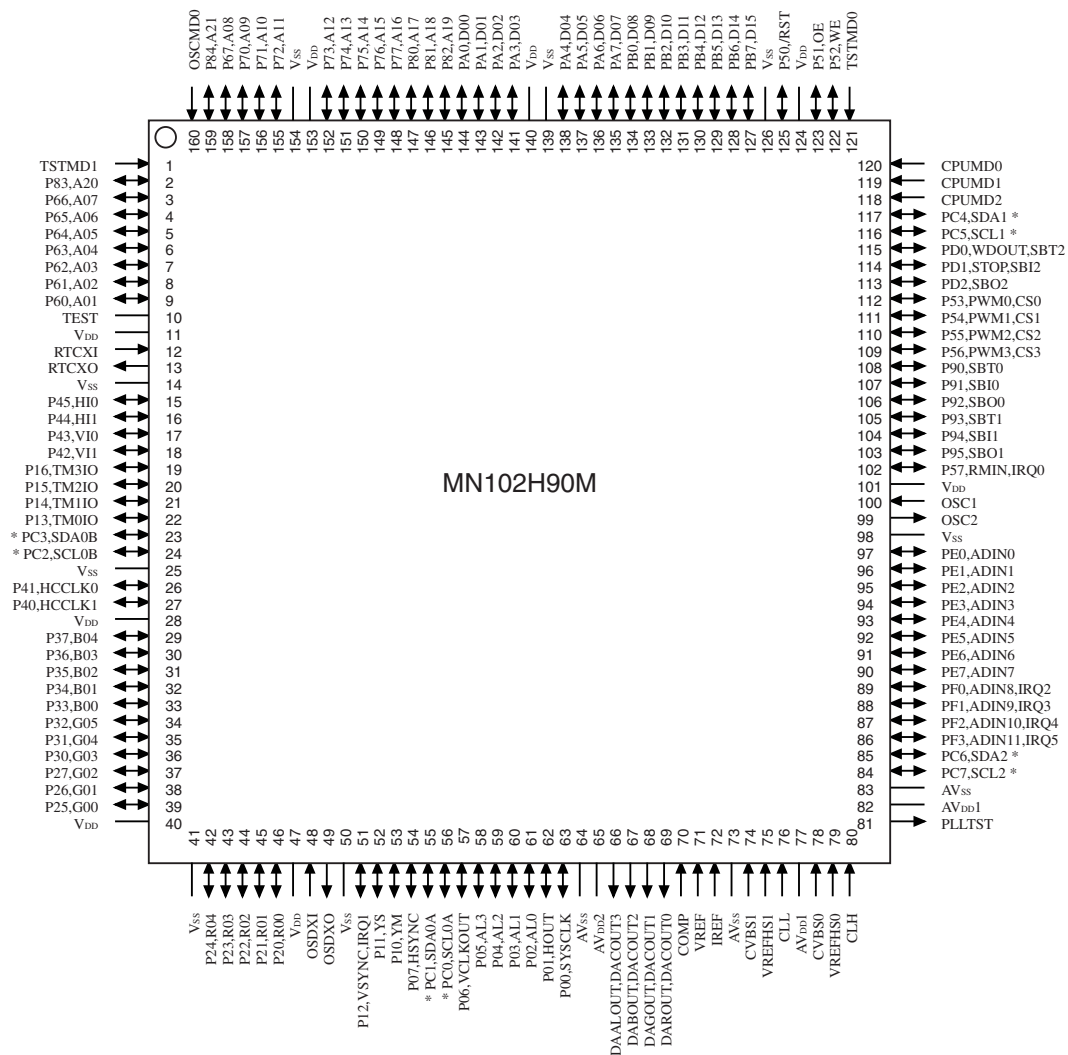


MN102H90M

Type		MN102H90M	
ROM		384 Kbyte or external ROM	
RAM		20 K	
Package		*QFP160-P-2828F *Lead-free	
Minimum Instruction Execution Time		83 ns (at 3.0 V to 3.6 V, 12 MHz)	
Interrupts		External (6 lines) Internal (35 lines) : Timer × 10, A/D × 1, OSD × 3, Serial × 6, I ² C × 3, Caption × 4, Remote control × 1, Address coincidence × 4, RTC × 3	
Timer Counter		8-bit timer × 10 Watchdog timer: 16-bit × 1	
Serial Interface		I ² C × 3: for multimaster mode, bus line (output) has 4 systems Sync serial / I ² C (master) / UART × 3	
Caption		• EBuilt-in sync separator × 2	
I/O Pins	I/O	111	• ECommon use
A/D Inputs		8-bit × 12-ch. (with S/H)	
D/A Outputs		8-bit × 4-ch. (general use or analog R, G, B, α output)	
PWM		8-bit × 4-ch.	
Special Ports		Remote control reception, digital OSD output	
CRTC		3-layer display (graphics, characters, sprites)	
Notes		Remote control input discriminant circuit, real time clock, hcounter built-in	

Pin Assignment



*QFP160-P-2828F *Lead-free

*: 5 V tolerant Nch open drain output pin

Support Tool

In-circuit Emulator

PX-ICE102H90-QFP160-P-2828F

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