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UPD70F3378M2GJA-GAE-AX

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Specification

Core	
CPU	V850ES (32-bit)
Performance	40 MIPS
Main oscillator	16 MHz external, 8 MHz internal
Sub-oscillator	32.768 kHz external, 240 kHz internal
Clock supervising	✓
Internal clock frequency (max.)	32 MHz
Instruction cycle time (min.)	20.83 ns
Interrupt channels	15 external, 66 internal

Memory	
Program memory	256 KB flash
RAM size	16 KB
Non-volatile memory size (EEPROM or emulation)	32 KB
ROM correction points	—
External address bus width	16 bit
External data bus width	16 bit

Interfaces	
Total number of I/Os	128
Open drain outputs	—
CAN	FCAN: 3 ch.
UART (asynchronous serial interface)	3 ch.
LIN	3 ch.
CSI (clocked serial interface)	3 ch.
I ² C	1 ch.
IEbus	—
On-chip debug interface	✓

Peripherals	
LCD controller/driver	—
A/D converter (10-bit)	24 ch.
Hardware multiplier	32x32->64, 32x32;32->32, 16x16->32, 16x16;32->32
Hardware divider	n.a.
DMA	4 ch.
Low Voltage Indicator	✓
Power-On Clear	✓

Timers	
Timers (8-bit)	—
Timers (16-bit)	9 ch.
Interval timers	1 ch.
Special timers	—
Watchdog timers	1 ch.