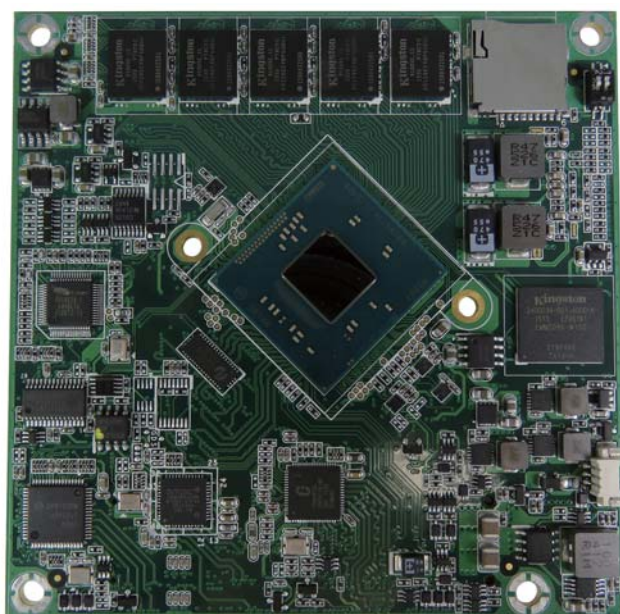


COMC-E380 Series

Extreme Temperature
COM Express® Compact Type 6 Module
with Intel® Atom™ E3825/E3845 Processor



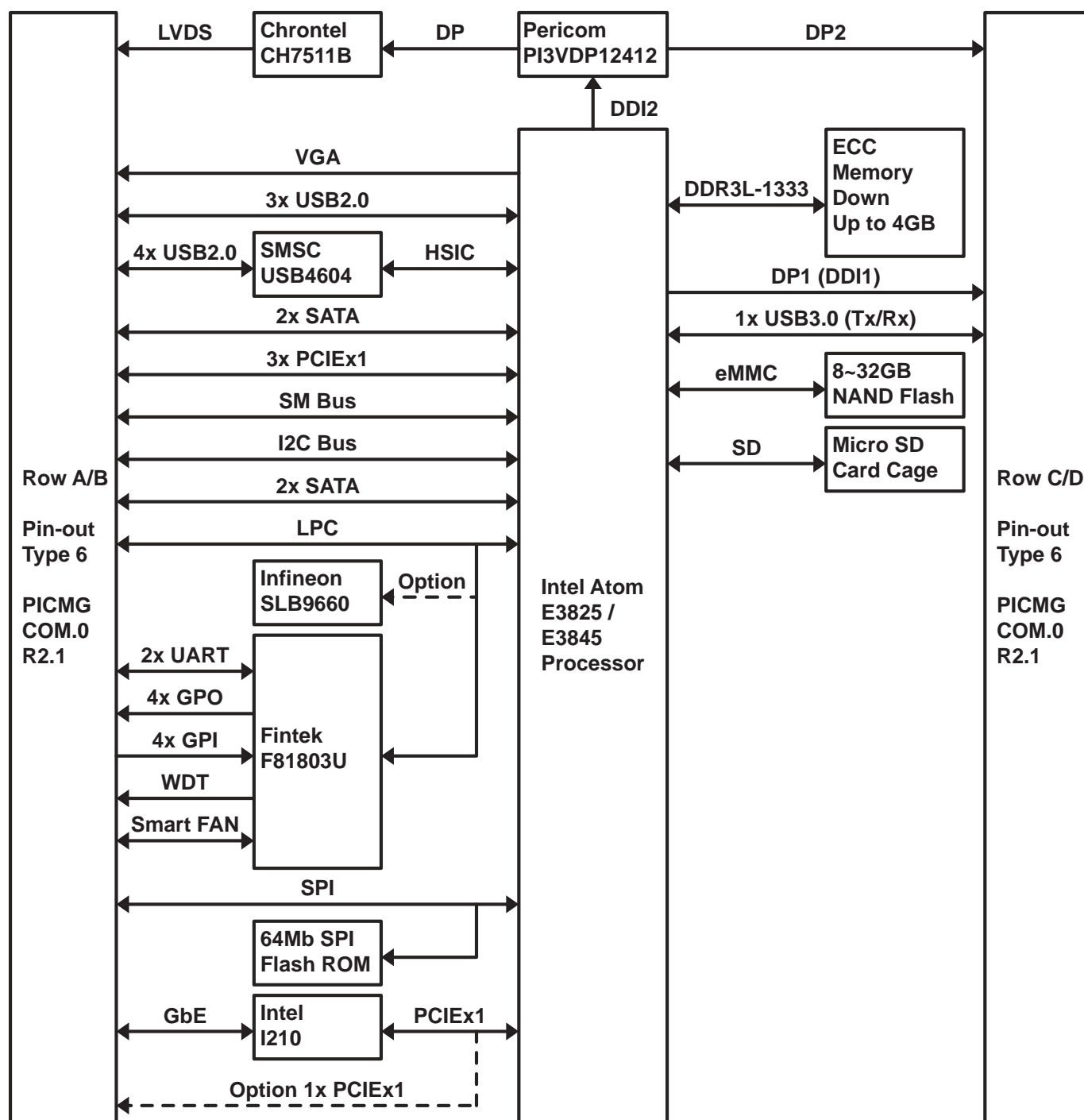
- Intel® Atom™ E3825/E3845 Processor
- 2GB/4GB DDR3L ECC memory onboard
- 1x DP, 1x VGA, 1x LVDS/DP for video output
- 16GB/32GB eMMC onboard, 2x SATA, 1x Micro SD card cage for storage
- 8x USB, 2x COM, I2C Bus, 8-bit GPIO for peripheral connection
- 1x LAN, 3x PCIe1 for data transmission
- Extreme operating temperature range: -40°C ~ 85°C

Product Overview

COMC-E380 Series is a COM Express® Compact Module with extreme temperature support and thus it can help developers efficiently and flexibly realize a robust, compact embedded device for extreme industrial and harsh environment applications. Equipped with Intel® Atom™ E3825/E3845 Processor, it is also a power-saving platform for high performance.

Besides onboard eMMC Flash, two SATA sockets and one micro SD card cage for storage, COMC-E380 Series supports a variety of I/O and expansion interfaces, including 1x DP, 1x VGA, 1x LVDS/DP for video putout, 1x LAN, 3x PCIe1 for data transmission, and 8x USB, 2x COM, I2C Bus, GPIO for peripheral connection.

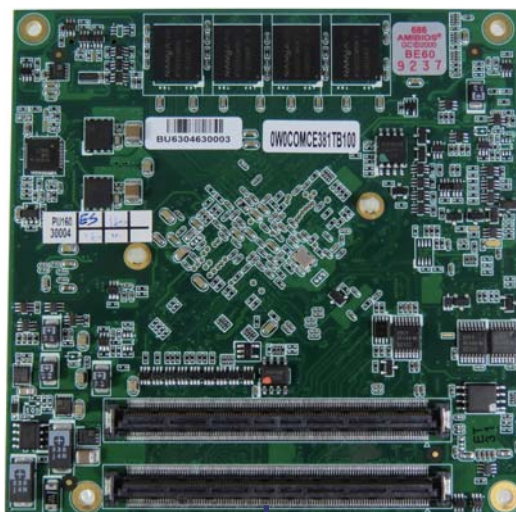
Block Diagram



Technical Information

Processor	COMC-E380T: Intel® Atom™ E3825 onboard (Dual Core, 1M Cache, 1.33 GHz, FCBGA1170, 6W TDP) COMC-E381T: Intel® Atom™ E3845 onboard (Quad Core, 2M Cache, 1.91 GHz, FCBGA1170, 10W TDP)
Memory	2GB DDR3L-1067 ECC memory onboard (COMC-E380T) 4GB DDR3L-1333 ECC memory onboard (COMC-E381T)
Graphics Controller	Intel® HD Graphics
Display Interfaces	1x LVDS/DP (via Pin-out, 18/24-bit, 1/2-ch, 1920 x 1200 @ 60Hz) 1x DP (via Pin-out, 2560 x 1600 @ 60Hz) 1x VGA (via Pin-out, 2560 x 1600 @ 60Hz)
Multiple Display	Dual
Audio Chipset	Realtek ALC888
Ethernet	1x LAN (via Pin-out, Intel® I210, replaceable by PCIe1 for option)
USB	1x USB3.0 (via Pin-out, 1x USB2.0 included) 7x USB2.0 (via Pin-out, 3x from CPU, 4x from HSIC Hub)
Serial Port	2x Tx/Rx (via Pin-out)
Other I/Os	1x 8-bit GPIO (via Pin-out) 1x LPC (via Pin-out) 1x I2C Bus (via Pin-out)
Storage & Expansion	16GB eMMC onboard (COMC-E380T) 32GB eMMC onboard (COMC-E381T) 2x SATA2.0 (via Pin-out) 1x Micro SD Cage 3x PCIe1 (via Pin-out, +1 when LAN is replaced by an optional PCIe1)
Power Supply	Type: Single Supply Power, ATX Input Voltage: 8.5V ~ 20V (Single Supply Power), 5VSB/12V (ATX)
Firmware	BIOS: AMI uEFI BIOS w/ 64Mb SPI Flash (boot from external SPI/FWH flash) Watchdog: Programmable WDT to generate system reset event H/W Monitor: Voltages, Temperatures Real Time Clock: Processor integrated RTC TPM: Optional (Infineon SLB9660 v1.2)
Cooling	1x Module Smart Fan (by wafer) 1x Carrier Smart Fan (via Pin-out)
OS Support	Windows 7, Windows 8, Windows 10, Linux
Dimension (L x W)	COM Express® Compact (95 x 95 mm / 3.74" x 3.74")
Pin-out Type	COM Express® R2.1 Type 6
Environmental Characteristics	Operating Temperature: -40°C ~ 85°C / -40°F ~ 185°F Storage Temperature: -55°C ~ 85°C / -67°F ~ 185°F Humidity: 0% ~ 95%
Certification	CE, FCC Class A

COMC-E380 Series I/O Ports



Type 6 Pin-out

Ordering Information



Article	Part No.	Description
COMC-E380T	BEMCE38T-000000T	COM Express® Compact Type 6, Intel® E3825, DDR3L 2GB, eMMC 16GB, 2x SATA, 1x DP, 1x VGA, 1x LVDS/DP, 8x USB, 2x COM, 1x LAN, 3x PCIe1, Op. temp.: -40 ~ 85°C
COMC-E381T	BEMCE38T-010000T	COM Express® Compact Type 6, Intel® E3845, DDR3L 4GB, eMMC 32GB, 2x SATA, 1x DP, 1x VGA, 1x LVDS/DP, 8x USB, 2x COM, 1x LAN, 3x PCIe1, Op. temp.: -40 ~ 85°C

Accessories

Article	Part No.	Description
CRRB-COM0	BBRBCOM0-000000T	COM Express® Carrier Board, Basic / Compact module size, Pin out Type-6