

# COM-E3845

COM Express<sup>®</sup> Mini Size Type 10 Module with Intel<sup>®</sup> Atom<sup>™</sup> or Celeron<sup>®</sup> Processor System-on-Chip

## 产品功能

- ◆ 单,双, 四核 Intel<sup>®</sup> Atom<sup>™</sup> 或 Celeron<sup>®</sup> SOC 处理器
- ◆ 板载单通道 4GB DDR3L 内存
- ◆ 板载 8-32G eMMC 电子盘
- ◆ 1 个双通道 18/24Bit LVDS 显示接口
- ◆ 1 个 HDMI 显示接口
- ◆ 3 个 PCIe x1, 1 个 GbE
- ◆ 2 个 SATA 3Gb/s, 4 个 USB2.0, 1 个 USB3.0
- ◆ 工作温度: -25°C to +75°C

扩展温度: -40°C to +85°C



## 技术参数

### 核心系统

CPU	Single, dual, quad-core Intel <sup>®</sup> Atom <sup>™</sup> or quad-core Celeron Atom <sup>™</sup> E3845 1.91 GHz 10W (4C/1333) Atom <sup>™</sup> E3827 1.75 GHz 8W (2C/1333) Celeron <sup>®</sup> J1900 2.0/2.42 (Burst) GHz, 10W (4C/1333)
Memory	Single channel ECC or non-ECC 1333/1066 MHz soldered DDR3L, memory up to 4GB
Embedded BIOS	AMI EFI with CMOS backup in 8MB SPI BIOS
Cache	Primary 32 KB, 8-way L1 instruction cache and 24 KB, 6-way L1 write-back data cache 2MB for E3845, J1900 1MB for E3827.
Expansion Busses	3 PCI Express x1 Gen2 (AB): lanes 0/1/2; Optional PCIe x4 (lose GbE) LPC bus, SMBus (system), I <sup>2</sup> C (user)

### 显示

GPU Feature	7th generation Intel <sup>®</sup> graphics core architecture with four Execution units supporting two independent displays 3D graphics hardware acceleration Supports for DirectX11, OCL 1.1, OGL ES Halt/2.0/1.1 Video decode hardware acceleration including support for H.264, MPEG2, MVC, VC-1, WMV9 and VP8 formats Video encode hardware acceleration including support for One DDI channel supporting DisplayPort/HDMI/DVI Double channel 18/24-bit LVDS eDP support(optional)
Display Interface	One DDI channel supporting DisplayPort/HDMI/DVI
LVDS/eDP	Double channel 18/24-bit LVDS eDP support(optional)

### 声卡

Chipset	Intel <sup>®</sup> HD Audio integrated in SOC
Audio Codec	Located on carrier COM-3845-底板

### 网络

Intel <sup>®</sup> MAC/PHY Interface	Intel <sup>®</sup> I210LM(MAC/PHY) Ethernet controller 10/100/1000 GbE connection
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## I/O 接口

USB	1xUSB 3.0 (USB 0) 3x USB 2.0 (USB 1,2,3)
SATA	Two SATA 3 Gb/s ports
Serial	2 UART ports (COM 0 support console redirection)
eMMC	Optional soldered on bootable eMMC flash storage 8G to 128 GB
SD	Optional, SD support multiplexed over GPIO pins eMMC and SD functions may vary between OS
GPIO	4 GPO and 4 GPI

## 扩展 I/O

Standard Input	On carrier if needed (standard support for SMC3114)
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## 电源

Standard Input	ATX = 12V±5% / 5Vsb ±5% or AT = 12V±5%
Wide Input	ATX = 5-14V / 5Vsb (standard temp. only) ATX = 5-14V / 5Vsb (standard temp. only)
Management Power States	ACPI 4.0 compliant, Smart Battery support C0, C1, C1E, C4, C6 S0, S3, S4, S5 (Wake on USB S3/S4, WOL S3/S4/S5)
ECO mode	Supports deep S5 (ECO mode) for power saving

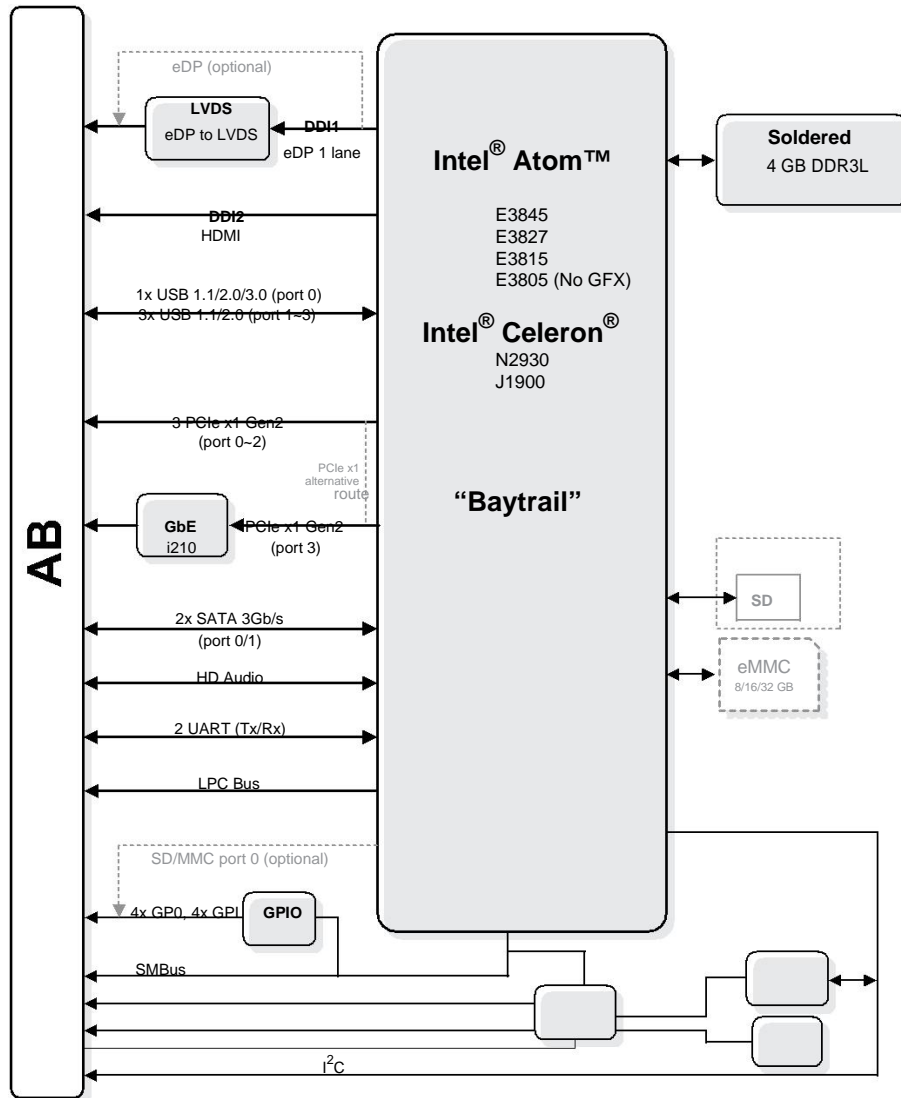
## 机械尺寸及环境

Form Factor	PICMG COM.0: Rev 2.1 Type 10
Dimension	Mini size: 84 mm x 55 mm
Operating Temperature	Standard: -25°C to +75°C Extreme Rugged: -40 to +85°C (optional, Atom <sup>™</sup> E38xx Series only)
Humidity	5-90% RH operating, non-condensing 5-95% RH storage (operating with conformal coating) MIL-STD-202F, Method 213B, Table 213H, Condition A and Method 214A, Table 214-I Condition D
HALT	Thermal Stress, Vibration Stress, Thermal Shock and Combined Test

## 操作系统支持

Standard Support	Windows 7/8 32/64-bit, Win10, Linux 32/64-bit
Extended Support	WES7/8, Linux, VxWorks 32/64-bit WEC7 32-bit

## 功能框图



## 订购信息

### COM Express 模块

模块型号	产品描述及设置
COM-E3845-4G	COM Express® Mini Size Type 10 with Intel® Atom™ E3845 at 1.91GHz and 4GB no ECC DDR3L
COM-J1900-4G	COM Express® Mini Size Type 10 with Intel® Atom™ J1900 at 2.00 GHz and 4GB no ECC DDR3L

## 开发工具

模块型号	产品描述及设置
COM 板开发套件	COM Express Type10 开发底板 COM Express Type10 核心主板 电子盘 mSATA-32G 电子盘 配件 电缆, 散热器, 螺钉