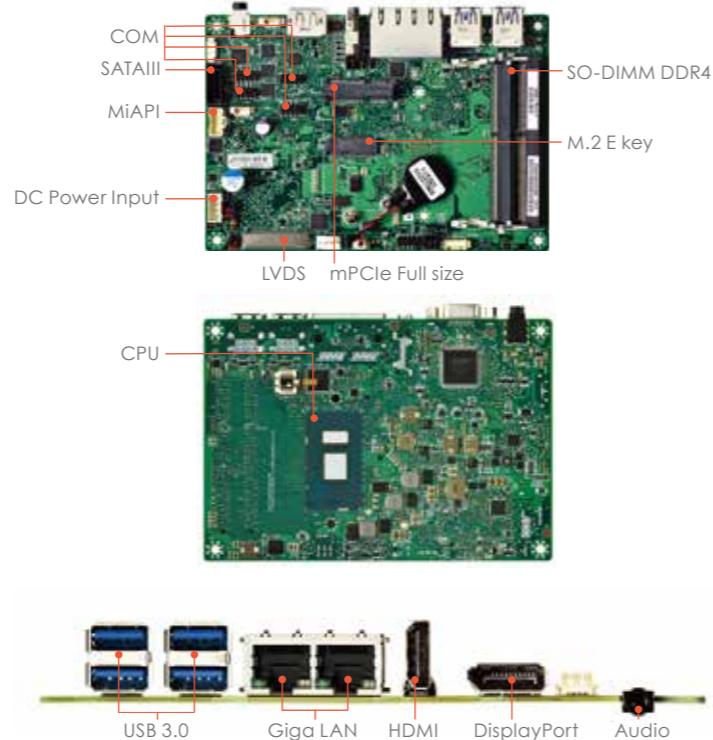
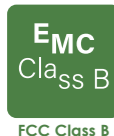


# PD11KS

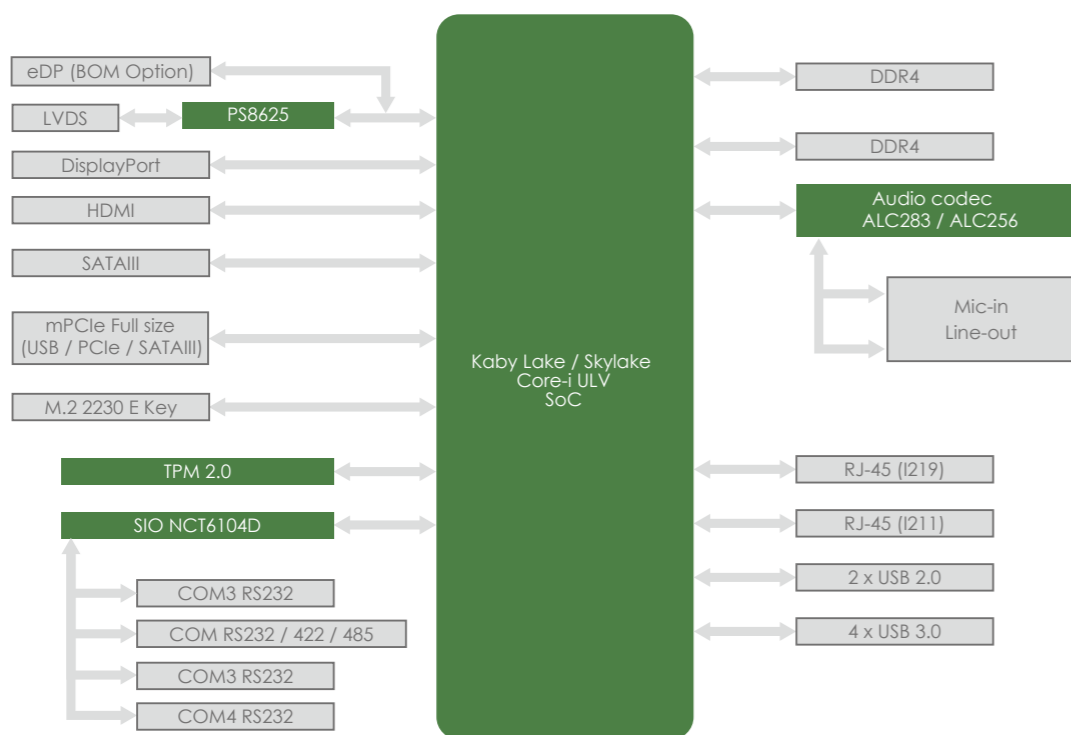
3.5" SBC Form Factor  
Intel® Kaby Lake / Skylake Processor

## Features

- Intel® Skylake / Kaby Lake Core i7/i5/i3 / Celeron ULV processors
- Intel® vPro technology support
- 2 x DDR4 SO-DIMM and support up to 32GB
- Support triple display for HDMI, DisplayPort and LVDS / eDP
- 1 x SATA III
- 2 x Intel® Gigabit Ethernet
- 2 x USB 2.0, 4 x USB 3.0 and 4 x COM
- 8V~24V wide voltage power input



## Block Diagram



# PD11KS 3.5" SBC

| MECHANICAL            |  |
|-----------------------|--|
| Form Factor           | 3.5" SBC Embedded: 4" x 5.8" (102mm x 147mm)   |
| SYSTEM                |  |
| Processor             | Intel® Kaby Lake-U i3-7100U (Dual Core, 3MB Cache, 2.40 GHz)<br>Option: Kaby Lake Celeron 3965U / i5-7300U / i7-7600U<br>Skylake Celeron 3955U / i3-6100U / i5-6300U / i7-6600U              |
| Chipset               | Intel® SoC Integrated  |
| Memory                | DDR4 2133/2400, 2 x 260-pin SO-DIMM, Max. 32 GB (Non-ECC)  |
| Graphics              | Intel® HD Graphics   |
| Ethernet              | Intel® I219LM Giga LAN + Intel® I211AT Giga LAN  |
| Audio                 | Realtek® ALC283 / ALC256   |
| I/O Chipset           | Nuvoton NCT6104D   |
| TPM                   | Nuvoton NPCT650ABCYX TPM2.0  |
| Expansion Slot        | Storage: Mini PCIe Full size (USB / PCIe / SATA)<br>Wireless: M.2 2230 E key (PCIe / USB)  |
| BIOS                  | AMI BIOS   |
| H / W Monitor         | Temperature Monitor, Voltage Monitor, Fan Monitor  |
| Watchdog Timer        | 1~255 Steps by Software Program  |
| Smart Fan Control     | CPU Fan  |
| GRAPHICS              |  |
| VGA                   | —  |
| DVI                   | —  |
| HDMI                  | Up to 4K (4096 x 2160) @24 Hz  |
| DisplayPort           | Up to 4K (4096 x 2160) @60 Hz  |
| LVDS                  | Up to 1920 x 1200 @60 Hz   |
| eDP (Option)          | Up to 4K (4096 x 2160) @60 Hz  |
| REAR I/O              |  |
| USB                   | 4 x USB 3.0  |
| Display I/O           | 1 x HDMI 1.4, 1 x DisplayPort 1.2  |
| Audio I/O             | 1 x Audio Combo Jack (Mic-in and Line-out)   |
| LAN I/O               | 2 x RJ-45  |
| Serial Port           | —  |
| PS/2 Port             | —  |
| Others                | —  |
| INTERNAL CONNECTORS   |  |
| Storage               | 1 x SATAIII  |
| USB                   | 2 x USB2.0   |
| Display I/O           | 1 x LVDS (colay eDP)<br>1 x Backlight Connector  |
| Audio I/O             | 1 x Audio Header Supporting System Stereo Speaker or Buzzer<br>1 x Audio Header without Amplifier (for Extra Amplifier Board for System Speaker)   |
| Serial Port           | 4 x RS232 (One Supports RS232/422/485)   |
| PS/2 Port             | —  |
| Parallel Port         | —  |
| GPIO                  | 1 x MiAPI Header (Programmable, Support 10 x GPIO)   |
| Fan                   | 1 x 4-pin PWM Fan Header   |
| Power                 | 1 x 8~24V 4-pin Power Header, 1 x AT/ATX Mode Select Jumper  |
| Others                | MiAPI: Programmable header (support 10 x GPIO, 1 x SMBUS, 1 x UART, 1 x Watchdog) with API library supported for Windows OS<br>1 x Chassis Front Panel Header (2 x 5-pin)<br>1 x CMOS Jumper |
| POWER REQUIREMENT     |  |
| Power Input           | 8~24V Wide Range DC Input w/ 4-pin Power Header (Pitch: 2.5mm)   |
| ENVIRONMENTAL         |  |
| Operating Temperature | 0 ~ 60°C (32 ~ 140°F)  |
| Storage Temperature   | -20 ~ 80°C (-4 ~ 176°F)  |
| Operating Humidity    | 10% ~ 95% R/H, non-condensing  |
| Certification         | CE & FCC Class B   |
| OS                    |  |
| OS Support            | Kaby Lake: Windows® 10 64bit, Linux (support by request)<br>Skylake: Windows® 7 32/64bit, Windows® 8.1 64bit, Windows® 10 64bit, Linux (support by request)                                  |

## Ordering Information

| Model Number     | Processor     | HS Configuration | Model Number     | Processor | HS Configuration |
|------------------|---------------|------------------|------------------|-----------|------------------|
| PD11KS-3965U-HSK | Celeron 3965U | MB + Heatsink    | PD11KS-7300U-HSK | i5-7300U  | MB + Heatsink    |
| PD11KS-7100U-HSK | i3-7100U      | MB + Heatsink    | PD11KS-7600U-HSK | i7-7600U  | MB + Heatsink    |

\*Option: eDP

## Packing List

| Packing           |                       |                             |
|-------------------|-----------------------|-----------------------------|
| • 1 x Motherboard | • 1 x 50cm SATA Cable | • 1 x 45cm SATA Power Cable |