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## Product Specifications of the $\mu$ PD63530, $\mu$ PD63910 and $\mu$ PD63911 SoCs

### [Overall specifications]

- Built-in USB control and SD-card control programs
- Ability to upgrade USB control and SD-card control programs from external flash memory [ $\mu$ PD63910 and  $\mu$ PD63530 only]
- Peripheral interfaces
  - MCU interface: CSI
  - External audio DAC interface: IIS
  - SD card interface: SPI
  - USB interface: 2.0 FS host
  - External serial flash interface: SPI [ $\mu$ PD63910 and  $\mu$ PD63530 only]
- Power supply voltage: 3.3 V (on-chip 1.0 V regulator)
- Oscillator element: 48 MHz
- Package:
  - 64-pin LQFP (10 mm  $\times$  10 mm) [ $\mu$ PD63910 and  $\mu$ PD63911]
  - 48-pin LQFP (7 mm  $\times$  7 mm) [ $\mu$ PD63530]

### [Audio decoder block]

- 24-bit operation, 24-bit output
- IIS output (master/slave selectable)  
Selectable between 64 fs 24-bit and 64 fs 16-bit
- Support for MPEG1 audio layer 3, MPEG2 audio LSF layer 3, Windows Media Audio, MPEG2 AAC, MPEG4 AAC
- 44.1 kHz fixed output using sampling rate converter
- Volume control using digital attenuator function

### [USB block]

- USB 2.0 Full-Speed compliant (12 Mbps: USB 2.0 FS host controller on-chip)
- Compliant with open HCI specification, release 1.0a
- Mass storage class, bulk transfer only

- USB overcurrent state input for VBUS management (OCI pin), USB current control output (PPON pin)