



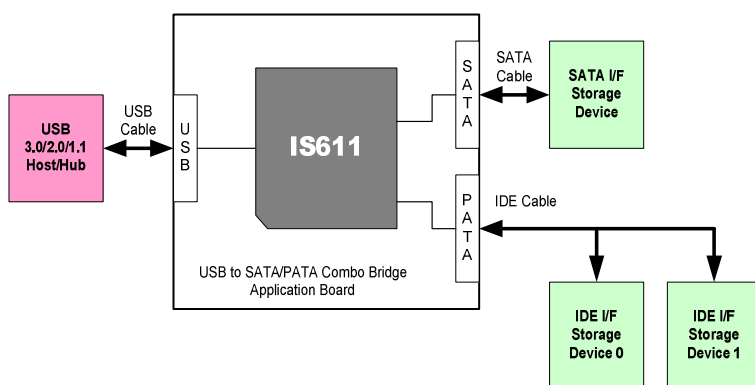
## Product Brief

IS611 is a highly-integrated single chip USB3.0 to SATA/PATA combo bridge controller. IS611 fully supports USB1.1/2.0/3.0 host, SATA I/II device and ATA/ATAPI device. It connects USB host and the external devices such as HDD, ODD or SSD. With high performance embedded micro processor and hardware accelerate circuit design, IS611 can achieve high throughput with lower power consumption. The integrated USB3.0 PHY is a silicon-proven high efficiency transceiver to guarantee good compatibility with all existing USB host. The USB, SATA and PATA engines comply with Universal Serial Bus specification 3.0, Serial ATA specification 2.6 and ATA/ATAPI-7 specifications.

IS611 implements the full USB Mass Storage Class specification ver.1.0 Bulk-Only protocol and complies with Windows 8 / 7 / Vista / XP, MAC and Linux operation systems.

With the integrated high efficiency 5V to 3.3V voltage regulator, IS611 can reduce the manufacture cost and save more PCB space to make the whole system compact more to fit the ultra slim ID.

IS611 is formed with QFN-64 (8mm x 8mm) package and SPI flash embedded providing the capability of firmware updating and customized setting. IS611 is worldwide only one and the highest C/P single chip solution for the external USB mass storage application.



## Key Feature

- Quick devices recognition
  - Connect three devices at the same time (SATA x 1, PATA x 2)
  - Build-in SPI flash
  - Build-in 5 to 3.3 LDO
  - Compliant with Universal Serial Bus 3.0 Spec Rev 1.0 (SuperSpeed, 5Gbps)
  - Backward compatible with Universal Serial Bus Spec Rev 2.0 (High-Speed, 480Mbps)
  - Backward compatible with Universal Serial Bus Spec Rev 1.0 (Full-Speed, 12Mbps)
  - Compliance with USB Mass Storage Class Spec Rev 1.0, Bulk-Only Transport
  - Compliant with Serial ATA Spec Rev 2.6 (SATA II, 3Gbps and SATA I, 1.5Gbps)
  - Compliant with ATA/ATAPI-7 Spec (PATA UDMA-6 133MB/s)
  - Support Windows 8 / 7 / Vista / XP / 2000 / ME, Mac OS 9 / 10 and Linux Operating System
  - Support dynamic HDD motor spin down
  - SPI flash for vender specific VID/PID setting
  - Support firmware update through USB port
  - Single 30MHz clock input
  - Support SATA Asynchronous Signal Recovery (Hot Plug)
  - Support ATA/ATAPI PACKET command set and Pass-Through command
  - Support ATA/ATAPI LBA48 bit addressing mode
  - Support ATA/ATAPI Ultra DMA Mode 0, 1, 2, 3, 4, 5, 6
  - Support ATA/ATAPI PIO Mode 0, 1, 2, 3, 4
  - Support HDD capacity larger than 2TB application
  - One Touch Backup solution ready
- ✓ **Free Application Software**
- One Touch Back utility