
2.11 eSATAII Interface Introduction

What is eSATAII?

This motherboard supports eSATAII interface, the external SATAII specification. eSATAII allows you to enjoy the SATAII function provided by the I/O of your computer, offering the high speed data transfer rate up to 3.0Gb/s, and the convenient mobility like USB. eSATAII is equipped with Hot Plug capability that enables you to exchange drives easily. For example, with eSATAII interface, you may simply plug your eSATAII hard disk to the eSATAII ports instead of opening your chassis to exchange your SATAII hard disk. Currently, on the market, the data transfer rate of USB 2.0 is up to 480Mb/s, and for IEEE 1394 is up to 400Mb/s. However, eSATAII provides the data transfer rate up to 3000Mb/s, which is much higher than USB 2.0 and IEEE 1394, and still keeps the convenience of Hot Plug feature. Therefore, on the basis of the advantageous transfer speed and the facilitating mobile capability, in the near future, eSATAII will replace USB 2.0 and IEEE 1394 to be a trend for external interface.

How to install eSATAII?



SATAII_RED (PORT2) and
SATAII_ORANGE (PORT3)



eSATAII_TOP and
eSATAII_BOTTOM

1. If you just plan to install one eSATAII device to this motherboard, it is recommended to enable the bottom eSATAII port of the I/O shield. In order to enable the bottom eSATAII port of the I/O shield, you need to connect the red SATAII connector (SATAII_RED) and the red eSATAII connector (eSATAII_BOTTOM) with a SATA data cable first. Then the bottom eSATAII port of the I/O shield is enabled.



Connect the SATA
data cable to the red
SATAII connector
(SATAII_RED (PORT2))



Connect the SATA
data cable to the red
eSATAII connector
(eSATAII_BOTTOM)



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- If you plan to install two eSATAII devices to this motherboard, you need to enable both the top and the bottom eSATAII ports of the I/O shield. In order to enable the top and the bottom eSATAII ports of the I/O shield, you have to connect the red SATAII connector (SATAII_RED) and the red eSATAII connector (eSATAII_BOTTOM) with a SATA data cable first, and then connect the orange SATAII connector (SATAII_ORANGE) and the orange eSATAII connector (eSATAII_TOP) with another SATA data cable. After that, both the top and the bottom eSATAII ports of the I/O shield are enabled.



Connect the SATA data cables to both red SATAII connector (SATAII_RED (PORT2)) and orange SATAII connector (SATAII_ORANGE (PORT3))



Connect the SATA data cables to both red eSATAII connector (eSATAII_BOTTOM) and orange eSATAII connector (eSATAII_TOP)



Please make sure to correctly connect the SATAII and eSATAII connectors with corresponding color so that the eSATAII function will work successfully.

- Use the eSATAII device cable to connect eSATAII device and the eSATAII port of the I/O shield according to the eSATAII connector that you connect the SATA data cable.



Connect one end of the eSATAII device cable to eSATAII device



Connect the other end of the eSATAII device cable to eSATAII port of the I/O shield

Comparison between eSATAII and other devices

IEEE 1394	400Mb/s
USB 2.0	480Mb/s
SATA	1.5Gb/s (1500Mb/s)
eSATAII/SATAII	3.0Gb/s (3000Mb/s)

