CUBIEBOARD
http://cubie.cc

RAID,JBOD,PM FAQ

Version	Author	Modification	Check
V-0.1-20141226	Andy	Init version	Suke

HDD_RAID FAQ:

Q1.How to connect Cubieboard3 and HDD_RAID？

A. HDD_RAID has a slot at the bottom, this slot match Cubieboard3's pins which near the power supply, Through power cable and SATA data cable (Cubieboard3's SATA interface and another SATA interface above it), make the connection between the two plates.

Q2.If your Cubieboard3 is Android system , support for what format the hard disk？

A. ntfs, vfat, (not support ext4, exfat mode)

Q3.If your Cubieboard3 is linux system, support for what format the hard disk？

A. ntfs, vfat, ext4, ext2......etc.

Q4.When you use new HDD/SDD to connect the HDD_RAID, does this need to be formatted？

A. Must to be formatted for HDD/SDD, so that the system can be better to recognized the SATA device.

Q5.When you use two HDD/SDD, respectively verification RAID0、RAID1、JBOD、PM mode one by one, does this need to be formatted？

A. Must to be reformatted for HDD/SDD, so that the system can be better to recognized the SATA device.

Q6.When you only have one mode of the HDD_RAID, how to format SATA？

A. For example, you only have a RAID1 mode of the HDD_RAID, and you have two SATA which never combine with the RAID0、JBOD mode before, then you can directly put the SATA on the HDD_RAID, use USB3.0 data cable to connect computer(Linux system or windows system) and HDD_RAID, them you can make partition and format SATA.

Q7.If your Cubieboard3 is linux system, Whether you can use USB3.0 data cable to establish a connection between the Cubieboard3 and the HDD_RAID so that you can format SATA？

A.Yes, you can. For example you have a Cubieboard3 which is linux system and RAID1 mode of the HDD_RAID. First start the linux system, put two SATA on the board of HDD_RAID, use USB3.0 data line connect the Cubieboard3's USB interface and HDD_RAID board's USB3.0 interface. Then power on and partition and format SATA。

Q8.In Windows computer,use different mode of the HDD_RAID, What should you do first when you change the HDD_RAID？

A. For example, you used RAID1 mode before, and now you should use JBOD mode.
　　First. take PM mode of the HDD_RAID, through USB3.0 data line connected to windows computer , enable the SATA（two SATA）
　　Second. Take out PM mode of the HDD_RAID, put on JBOD mode of the board, partition and format SATA again（only one area）

Q9.In Linux computer, use different mode of the HDD_RAID, What should you do first when you change the HDD_RAID？

A. For example, you used RAID1 mode before, and now you should use JBOD mode.

First. take PM mode of the HDD_RAID, through USB3.0 data line connected to Linux computer , Create a new partition for each SATA, and each SATA have only one partition.

Second. Take out PM mode of the HDD_RAID, put on JBOD mode of the board, partition and format SATA again（only one area）

Q10.In Linux computer, how to partition of the SATA？

A. For example：RAID0 mode , insert two SATA , through USB3.0 data line connected to Linux computer, After being recognized by Linux system , check the partition first, remember: to partition sata first, then format sata。
   command: fdisk /dev/sd* (* is your devices nodes, and you should note that permissions issues）
   Usual operation: **p**(partition table) → **n**(add new partition) → **p**(main partition) → **1**(partitions start from 1) → **click Enter**(partition size is not set) → **w**(write partition table to disk and disk)

Q11.In Linux computer, how to format SATA？

A.
1.mkfs.ntfs /dev/sda*
   use this command to format   (* is a number of the partition, the path may not be the same, and should note that permissions issues)

2.mkfs.vfat /dev/sda*

Q12.Is there any requirement for the operation when power is cut off？

A. The power must be disconnected before taking out SATA, in order to avoid damaging your SATA.

Q13.When you used JBOD mode of the board, how is the data stored？

A. Under the universal condition, Data is stored in SATA0 first, when SATA0 run out of memory, then data is stored in SATA1。

Q14.Why, when using the RAID1 mode of the HDD_RAID, LED1 and LED4 will always flicker？

A. Because at this moment,the data is being exchanged between the two SATA. The premise is that two SATA's data is not the same.
For example:
SATA's hot-swappable in RAID1 mode（one disk is broken, change a new disk）;
When playing video , Pull out a disk first, and then insert the disk, In order to keep playback progress the same. LED will flicker.

Q15.When using RAID0 mode and JBOD mode of the board, How to judge whether array of disk is successful combination？

A. When you insert two SATA into the board , the system only recognize a disk , the capacity is superposition of two disks。

Q16.When using RAID1 mode of the HDD_RAID, How to judge whether array of disk is successful combination？

A. When you insert two SATA into the board，the system only recognize a disk，the capacity is superposition of one disks. When data is written into the SATA，LED1 and LED4 will flicker at the same time。

Q17.When using PM mode of the board, what is the sign of success？

A. The system can recognize two SATA, two disks can work independently and would not affect each other.

Q18.why did linux system or windows system cannot recognize the SATA？

A. You should check the format of sata first, then check the type of formatting.

Q19.When SATA used in different mode of the HDD_RAID, What will happen when SATA needs to be formatted？

A. There will be data loss.

Q20.When you test the RAID0 mode, RAID1 mode and JBOD mode of the board, Can you just insert a SATA (not two)？

A. No，Because it's a disk array, so you should insert two SATA into the board. Only by this can normally using be promised