

Description of Operation

The HI3512 is the central controller of the whole system, it has direct interface to on the board memory and all peripherals ,so no glue logic is needed in system design. The system has one 16Mbyte Nor flash and one 64M x 16 bit DDR2,, the system has total two I2C slave devices, audio codec and video codec interface will share the same I2C port .One PHY chip is use on board, so the system can provide one 802.3 Ethernet RJ45 connection to LAN.

1. Interface between the HI3512 and NOR flash

The NOR flash in the system is mainly used for program and data storage, based on the application, the system May need to support up to 16MByte NOR flash, the system supports booting from 8-bit NOR devices

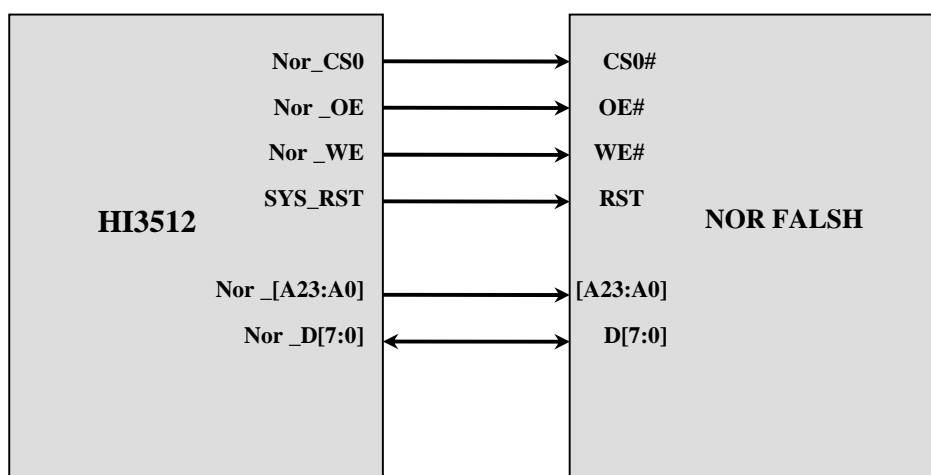


Figure 1.1 Signal connection between HI3512 and NORflash

2 Interface between HI3512 and DDR2 SDRAM

The HI3512 DDR2 Memory Controller is a dedicated interface to DDR2 SDRAM. It supports JESD79D-2A standard compliant DDR SDRAM devices and compliant Mobile DDR SDRAM devices .DDR2 SDRAM plays a key role in a HI3512-based system.

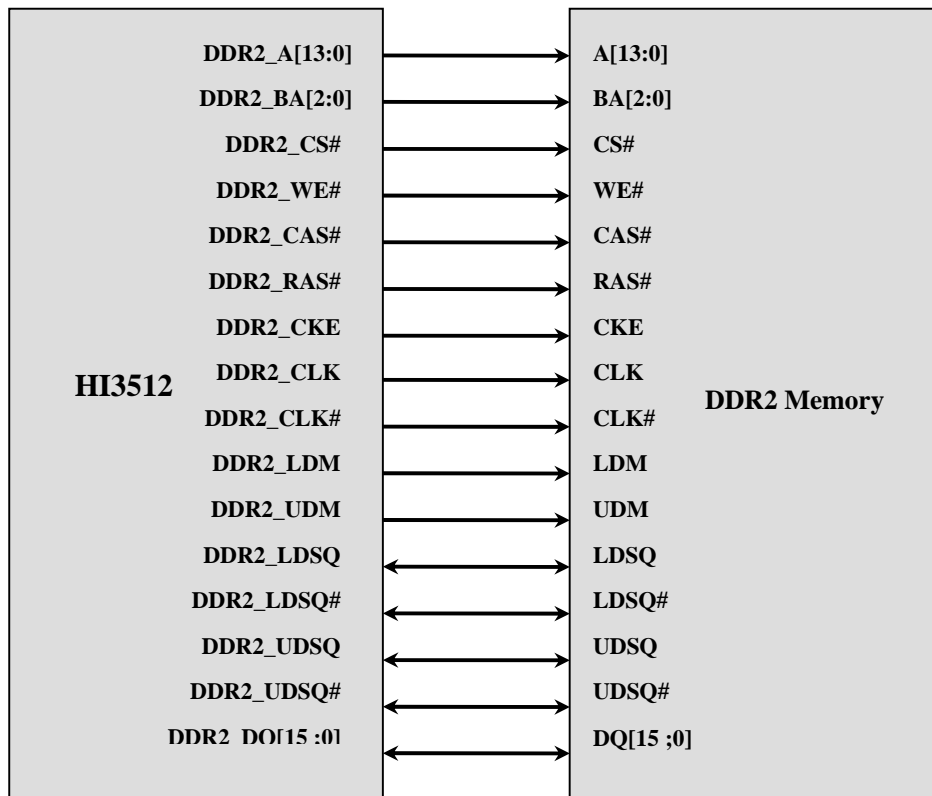


Figure 2.1 Signal connection between HI3512 and DDR2 memory