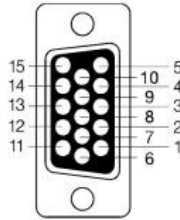


Hardware Design – Backplane Interface

• HD15 Connector

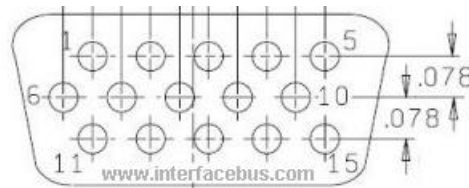
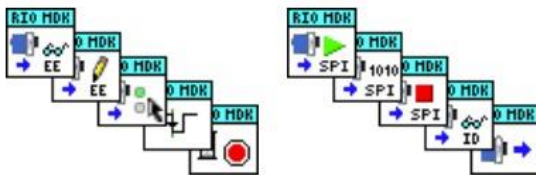
- FPGA → Module
- 8x DIO
- 5x Dedicated Purpose



HD15 Pin	Function
1	Special (ID_SELECT)
2	GPIO / SPI
3	Special (Reserved)
4	Special (Power)
5	GPIO
6	GPIO / SPI
7	GPIO / SPI
8	Special (SLEEP)
9	GPIO
10	GPIO
11	Special (SPI Clock)
12	GPIO / SPI
13	Special (Reserved)
14	Special (GND)
15	GPIO

• SW Wrappers

- SPI communication
- Timing and synchronization
- Custom communication schemes



Over-molded VGA cable's wire colors.

1. RED center
2. GREEN center
3. BLUE center
4. Black (Vcc)
5. brown
6. RED SHIELD
7. GREEN SHIELD
8. BLUE SHIELD
9. red
10. orange
11. yellow
12. green
13. blue
14. purple (Gnd)
15. grey