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ECE 373

**1.**

**a) What is the audio device?**

The device is a Realtek ALC892.

**b) What device is the GPIO connected to?**

GPIO is connected to the Super IO Winbond W83627DHG.

**c) How many network (LAN) devices are on the motherboard and what are they?**

There are 2 LAN devices on the motherboard.

• GbE LAN1: Intel 82567V

• GbE LAN2: Intel 82583V

**d) How many total serial ports does the box support, inside and out?**

Six serial ports total, 3 inside and 3 outside.

**2**

**a) What pins control the LEDs?**

Pin 30 controls LED1 and Pin 31 controls LED0 and pin 33 controls LED2.

**b) What address offset is the Device Control Register?**

The Device Control Register is at Memory Offset 0x00000 or 0x00004.

**c) What bit in the Device Control Register will force a reset of the network chip?**

Bit 31 of device control register will do a reset of the chip

**3.**

**a) What register (name and address) controls the LEDs?**

The LED Control Register is named LEDCTL and it is located at address 0x00E00.

**b) What bit pattern should you use to turn off LED1?**

The LED1 will turn OFF with 0x00000F00.

**c) What bit pattern should you use to make LED2 blink?**

Led 2 will blink with 0x00240000

**4.**

**a) What company makes the Super I/O chip in this box?**

Winbond.

**b) Can you find the datasheet on the web?**

http://www.alldatasheet.com/datasheet-pdf/pdf/206193/WINBOND/W83627DHG.html

**c) Where/how can you find this chip's datasheet if you aren't able to find it with a standard web search?**

We can email or call Winbond.