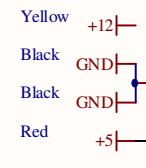


4-pin power connector

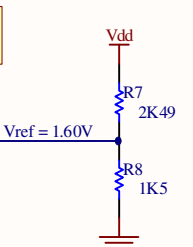
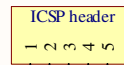


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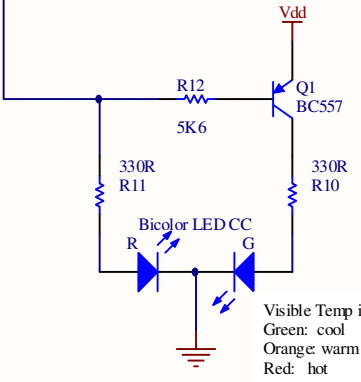
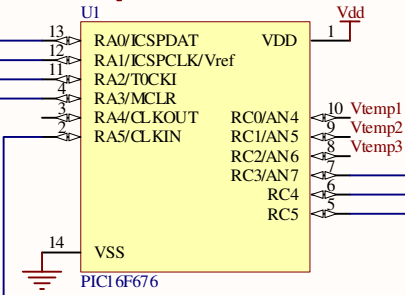
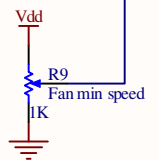
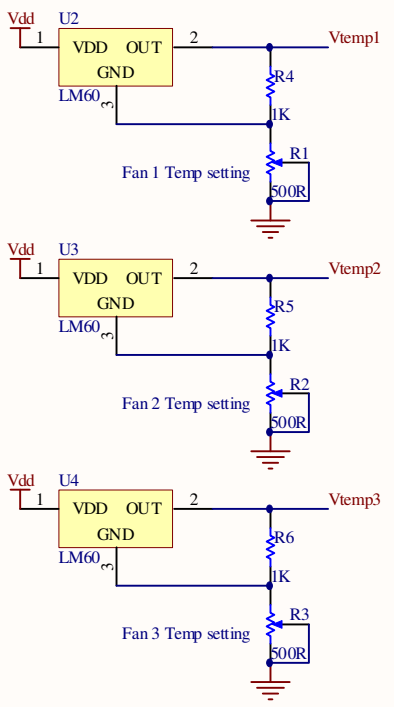
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3

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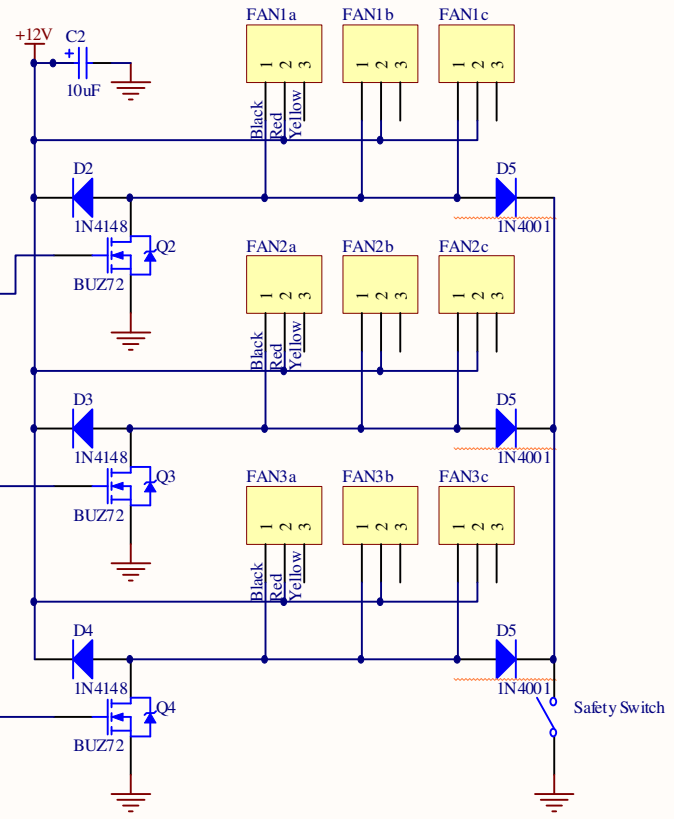


Temperature sensors for 3 fan groups



Visible Temp indication:
Green: cool
Orange: warm
Red: hot

FAN 3-pin header connectors



The PIC16F676 performs A-to-D conversion on the 4 analog inputs, and creates a PWM output signal to drive the fans. Besides 3 temperature values, one for each group of fans, it samples a value for a shared minimum fan speed setting. On rising temperatures, the fan speed rises linearly and immediately. On decreasing temperatures, the fan speed decreases only very slowly, to avoid control instability: from 100% to 0 speed in about 8 minutes. Lowest temp setting (turn left): 20 to 30 degrees celcius results in 0 to 100% fan speed. Highest temp setting (turn right): 65 to 80 degrees celcius results in 0 to 100% fan speed.

Title			FAN speed controller: multi-fan with temperature sensing		
Size	Number		Revision		
A4					
Date:	24-7-2005		Sheet of		
File:	E:\os\fanctrl\SchDoc		Drawn By:		Jos van Eijndhoven

1

2

3

4