

Using the on-board 3-wire, speed controllable, 5V external FET driven fan

Overview:

The Fan Module connects to the CY3210-ExpressDK main board to allow easy PSoC development with fan control and temperature measurement.

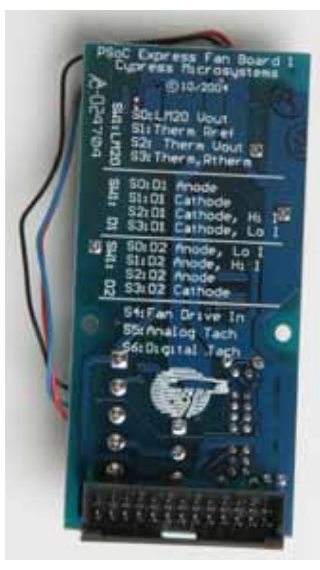
Fan Control Features:

- Control an on-board 3-wire, speed controllable, 5V external FET driven fan
- Control an off-board attached 2, 3, or 4-wire fan

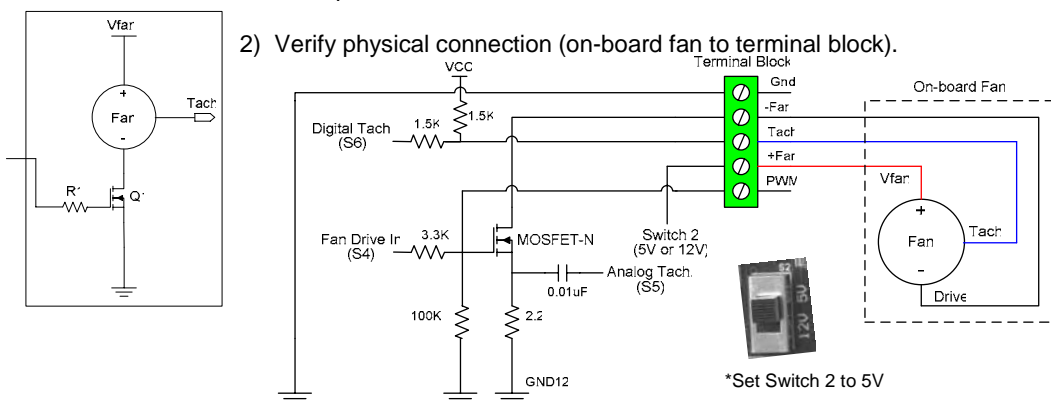
Temperature Measurement Features:

- On-board LM20
- On-board Thermister
- Two different topologies for on-board Diode Sensing

Back of module includes Module Port routing info and explanation of switch settings

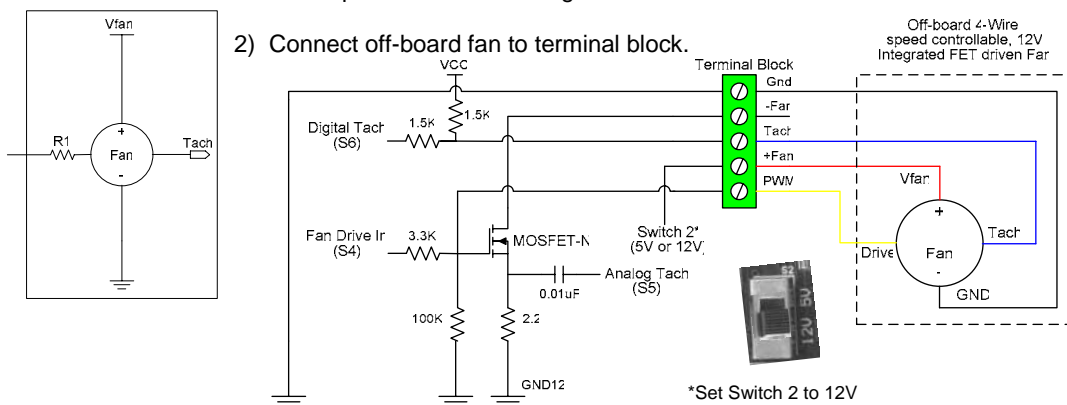


- 1) Select appropriate PSoC Express output device:
Fan >> Brushless DC >> Speed Control >> External Drive FET >> 5V 2-/3-Wire.



Attaching an off-board 4-wire, speed controllable, 12V integrated FET driven fan

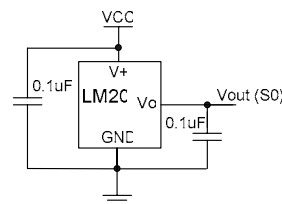
- 1) Select appropriate PSoC Express output device:
Fan >> Brushless DC >> Speed Control >> Integrated Drive >> 12V 4-Wire.



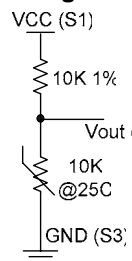
Using the LM20



- 1) Select appropriate PSoC Express input device:
Temperature >> Integrated Circuits >> LM20 -55 to +130C.
- 2) Set Switch 1 to LM20. (LM20 Vout available on S0).



Using the Thermistor



- 1) Select appropriate PSoC Express input device:
Temperature >> Thermistor Temp Sensor.
- 2) Set Switch 1 to LM20
 - Vcc available on S1
 - VTherm available on S2
 - GND available on S3



Diode Sensor Topologies

The Diode Sensor will be supported in future releases of PSoC Express.

