

# 12 Bit Digital to Analog Converter(MCP4725)

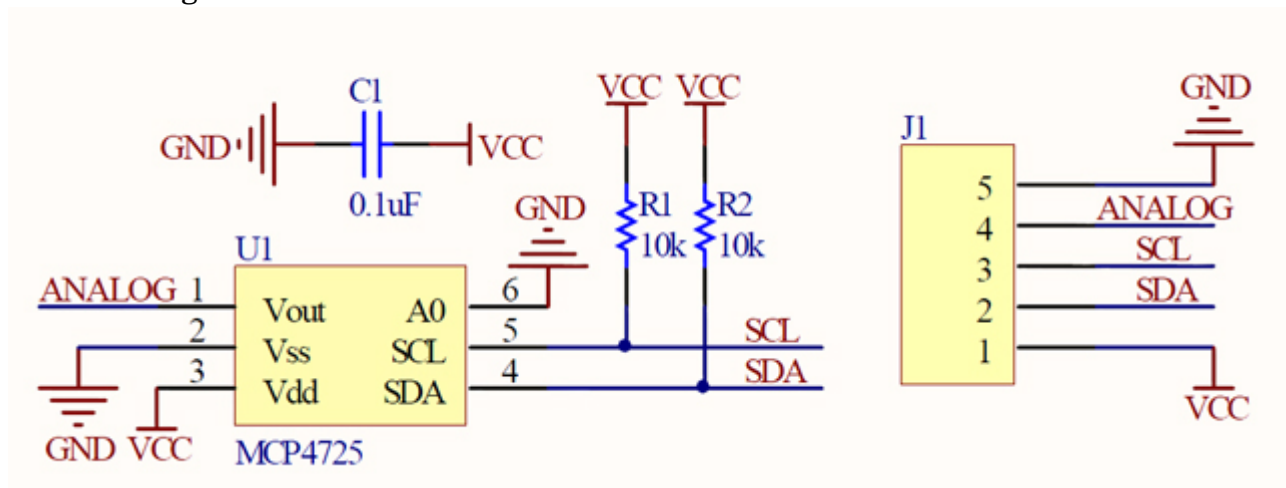
20140307

Reference;

MCP4725\_0.1.f

i2c\_utility\_0.1.f

Curcuit Diagram



MCP4725'address is h60.

eeeprom(24LC512) on QuickStartBoard is h50.

Prop0 Cog6 ok

i2c\_detect

0 1 2 3 4 5 6 7 8 9 A B C D E F

00: 00 -----

10: -----

20: -----

30: -----

40: -----

50: 50 -----

60: 60 -----

70: -----

i2c\_device:2

Prop0 Cog6 ok

MCP4725 also respond to GeneralCall

## Checking status

Prop0 Cog6 ok

disp\_status

--- EEPROM ---

Value: 2048

PowerDownBits: normal

--- DAC register ---

Value: 2048

PowerDownBits: normal

Power On Reset: 1

EEPROM Write Status:Ready

Prop0 Cog6 ok

## Analog output is 3.307V.

4095 normal chg\_DAC disp\_status

--- EEPROM ---

Value: 2048

PowerDownBits: normal

--- DAC register ---

Value: 4095

PowerDownBits: normal

Power On Reset: 1

EEPROM Write Status:Ready

Prop0 Cog6 ok

## Analog output is 0V.

2000 1k chg\_DAC disp\_status

--- EEPROM ---

Value: 2048

PowerDownBits: normal

--- DAC register ---

Value: 2000

PowerDownBits: 1k

Power On Reset: 1

EEPROM Write Status:Ready

Prop0 Cog6 ok

Analog output is 0V.

1000 500k chg\_DAC disp\_status

--- EEPROM ---

Value: 2048

PowerDownBits: normal

--- DAC register ---

Value: 1000

PowerDownBits: 500k

Power On Reset: 1

EEPROM Write Status:Ready

Prop0 Cog6 ok

Data inside EEPROM is loaded to DAC register by reset.

Analog output is 1.657V .

reset disp\_status

--- EEPROM ---

Value: 2048

PowerDownBits: normal

--- DAC register ---

Value: 2048

PowerDownBits: normal

Power On Reset: 1

EEPROM Write Status:Ready

Prop0 Cog6 ok

Same as [3500 normal chg\_ADC ]

3500 normal wr\_DAC disp\_status

--- EEPROM ---

Value: 2048

PowerDownBits: normal

--- DAC register ---

Value: 3500

PowerDownBits: normal

Power On Reset: 1

EEPROM Write Status:Ready

Prop0 Cog6 ok

It seems Write-command(Fast mode and Write DAC register) is same.

Referring MCP4625.pdf's page18 and 19.

Same value are written to DAC asnd EEPROM.

1500 normal wr\_DAC&EEPROM

Prop0 Cog6 ok

disp\_status

--- EEPROM ---

Value: 1500

PowerDownBits: normal

--- DAC register ---

Value: 1500

PowerDownBits: normal

Power On Reset: 1

EEPROM Write Status:Ready

Prop0 Cog6 ok

It aseems different value are NOT written to DAC and EEPROM.

Refering wr\_DAC&EEPROM1.

I have no idea.

Prop0 Cog6 ok

demo1

