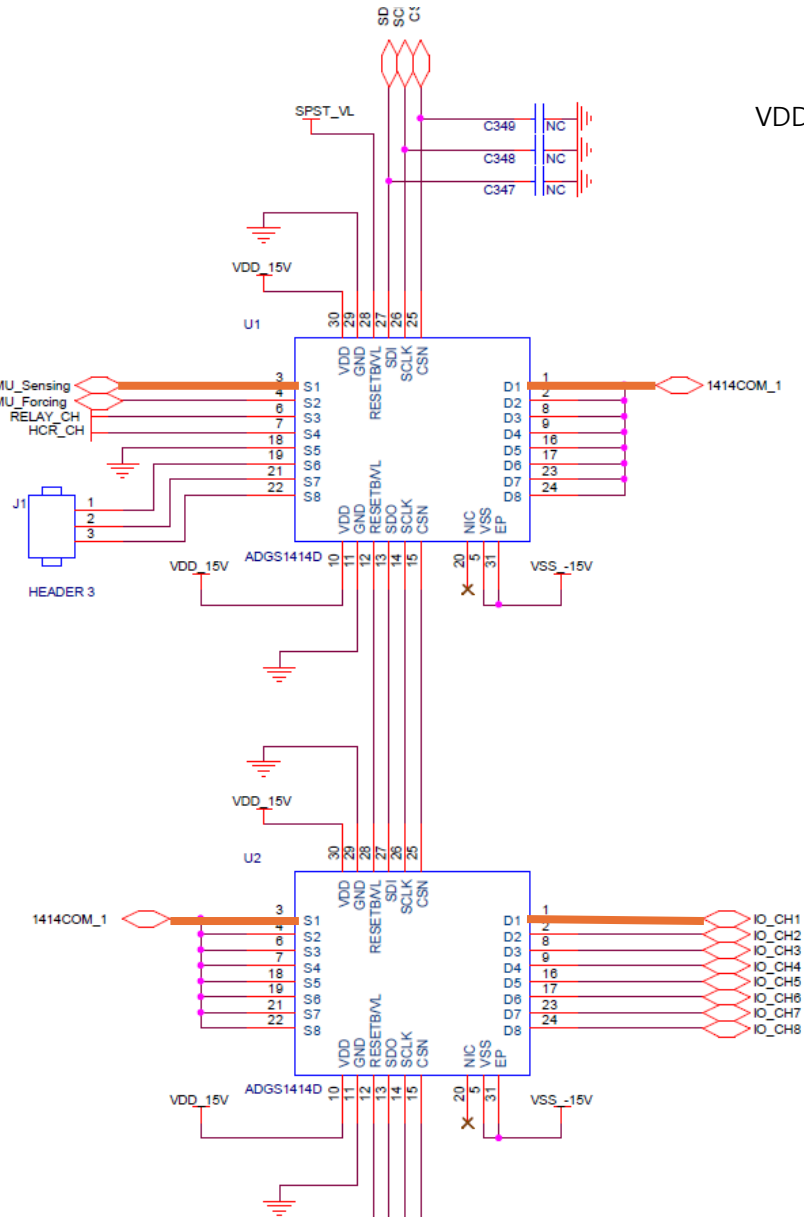


Board configuration and measurement conditions

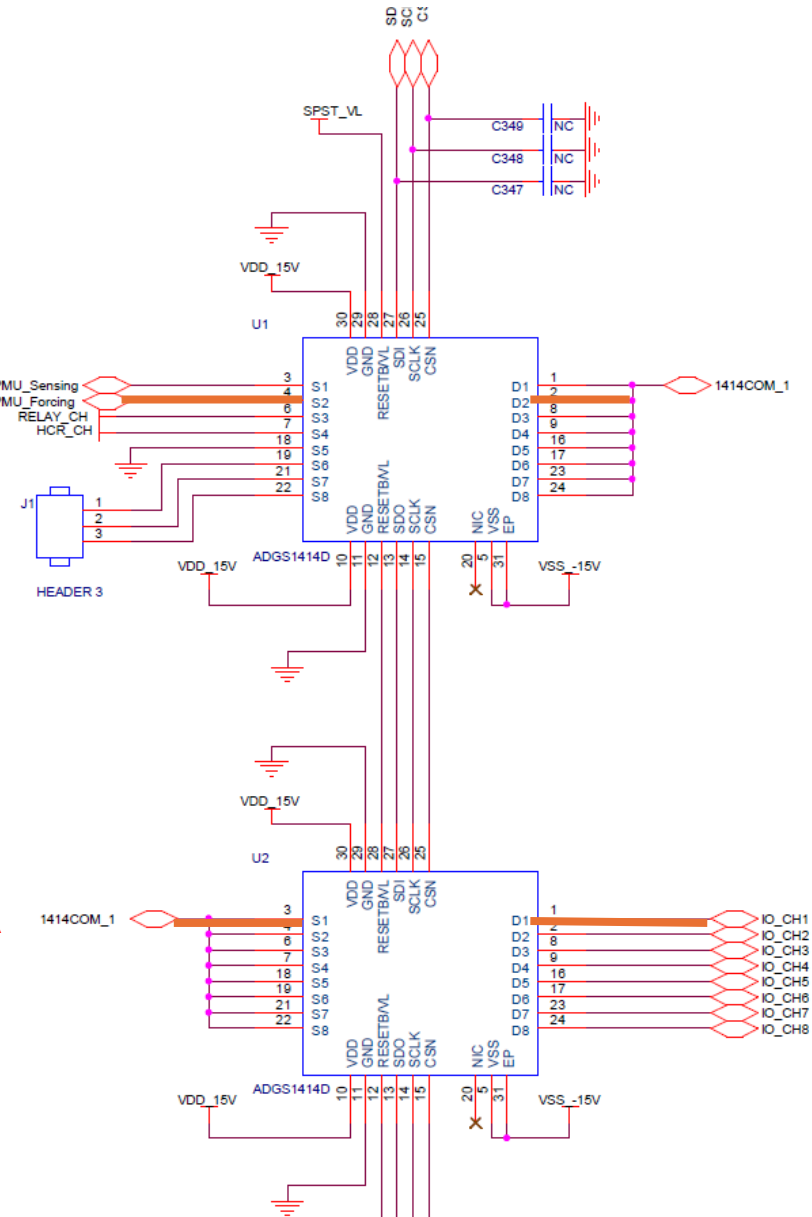
VDD=15V, VSS=-15V, VL=3.3V

PMU_Sensing



1414COM_1 <-> TMUXS7614D / ADGS1414D <-> IO_CH256

PMU_Forcing



1414COM_1 <-> TMUXS7614D / ADGS1414D <-> IO_CH256

-> PMU -> ADC -> FPGA

-> PMU -> ADC -> FPGA

Leakage current

There are no capacitors on power pins because there are internal capacitors, and in case of ADGS1414D, there is no difference between with capacitors and without capacitors. Should the capacitors be needed to improve this issue?

Measurement result of ADGS1414D

MI Range	Set V	X1 Reg	MI ADC	ADC to MI (nA)	Min	Max	Diff
0.003	5	49151	7235	1.036906	7190	7260	70

Measurement result of TMUXS7614D

MI Range	Set V	X1 Reg	MI ADC	ADC to MI (nA)	Min	Max	Diff
0.02	5	49151	13215	19.840156	13171	13258	87

Channel path resistance

Channel path resistance of ADGS1414D is 3.19 ohm, but TMUXS7614D is 2.5 ohm.

Measurement result of ADGS1414D

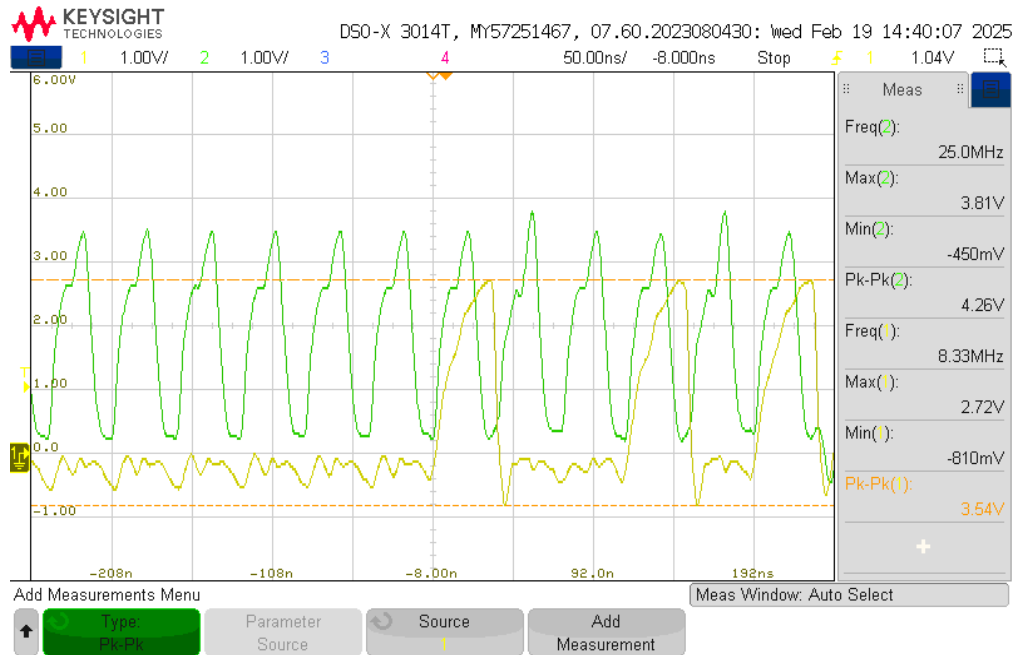
FI Range (uA)	Force I (mA)	R	Typ V	MV ADC	ADC to MV (V)	R
50000	50	Short		7300	0.160	3.190

Measurement result of TMUXS7614D

FI Range (uA)	Force I (mA)	R	Typ V	MV ADC	ADC to MV (V)	R
50000	50	Short		7287	0.125	2.501

SDO voltage level

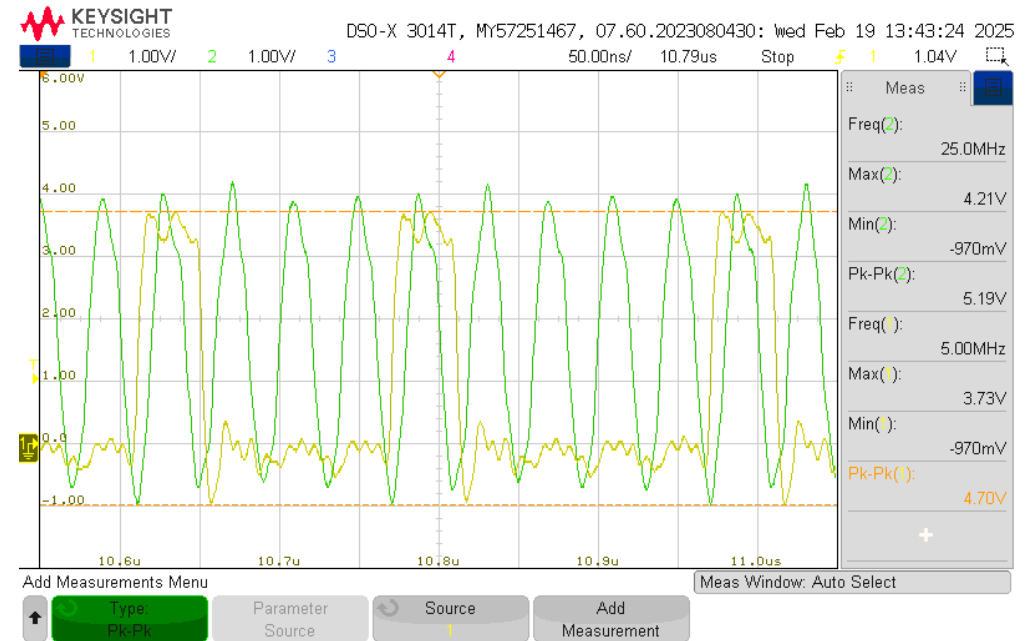
Measurement result of ADGS1414D



Green : CLK, Yellow : SDO

Before SPI communication, SDO voltage level is about 3.3V, but it is about 2.5V after SPI communication as above waveform.

Measurement result of TMUXS7614D



Green : CLK, Yellow : SDO

Before SPI communication, SDO voltage level is about 2.4V, but it is about 3.3V after SPI communication as above waveform.

Could you explain the reason why it is 2.4V before SPI communication?