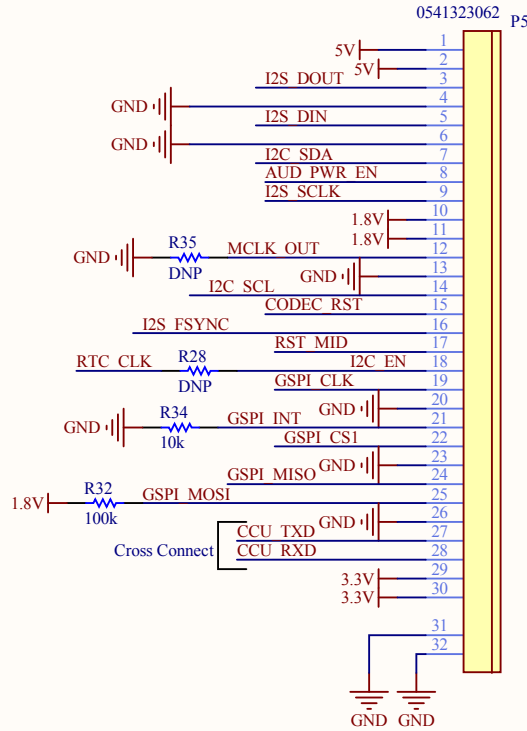


H2 H3
DNP DNP
mounting holes

3.3V
TP8

to the top board



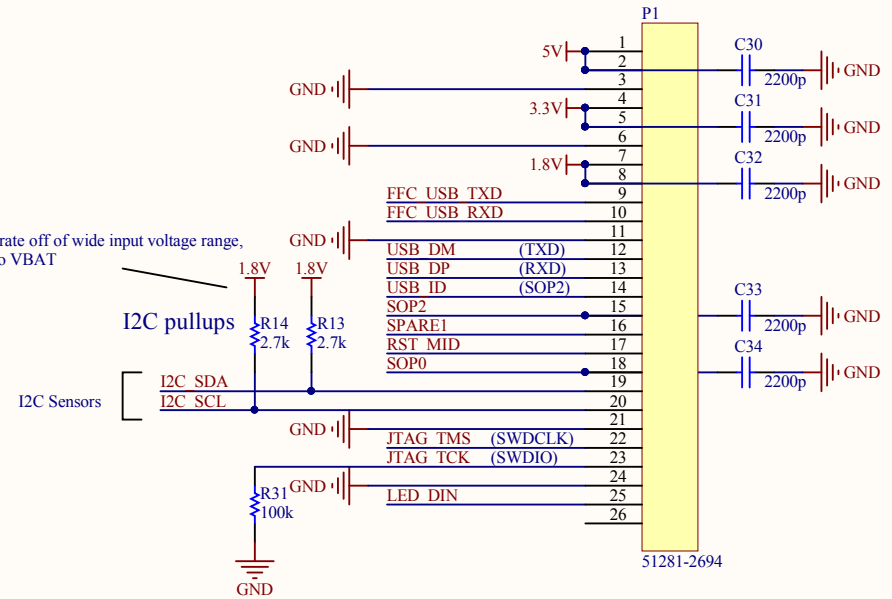
IF CC3200 is changed to operate off of wide input voltage range,
the 1V8 tie needs to change to VBAT

NOTICE OF PROPRIETARY PROPERTY

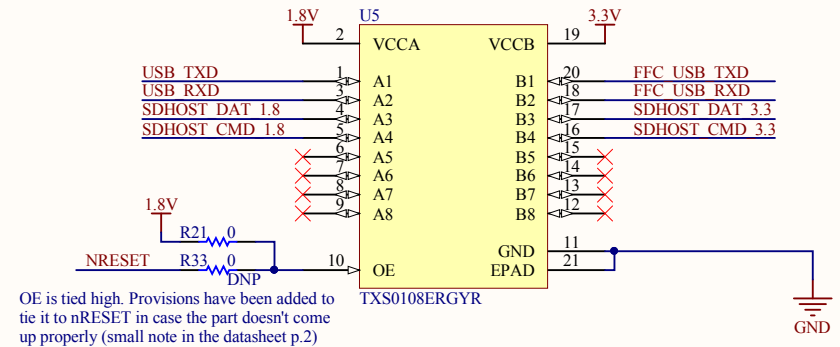
THE INFORMATION CONTAINED HEREIN IS THE
PROPRIETARY PROPERTY OF HELLO INC.
THE POSSESSOR AGREES TO THE FOLLOWING:

- TO MAINTAIN THE DOCUMENT IN CONFIDENCE
- NOT TO REPRODUCE OR COPY IT
- NOT TO REVEAL OR PUBLISH IN WHOLE OR PART

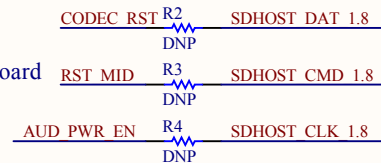
to the bottom board



8-bit level shifter



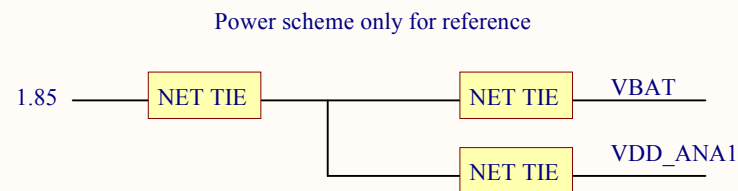
to the top board to CC3200



Hello

ITEM NAME
Connector
Middle Board, Proto, Sense 1.5

ITEM NUM. 530-00012-02	REV 1
DATE 3/23/16	DRAWN BY H. Asgarian
SHEET 2 OF 7	



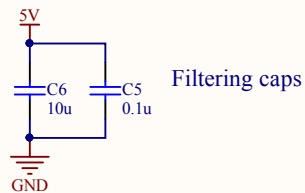
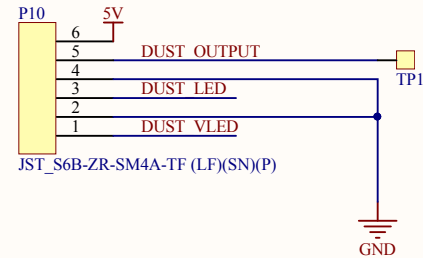
Route ground traces for C15, C16 and C17 to single vias on the EPAD. Isolate them from pours in inner layers

I. TO MAINTAIN THE DOCUMENT IN CONFIDENCE
II. NOT TO REPRODUCE OR COPY IT
III. NOT TO REVEAL OR PUBLISH IN WHOLE OR PART

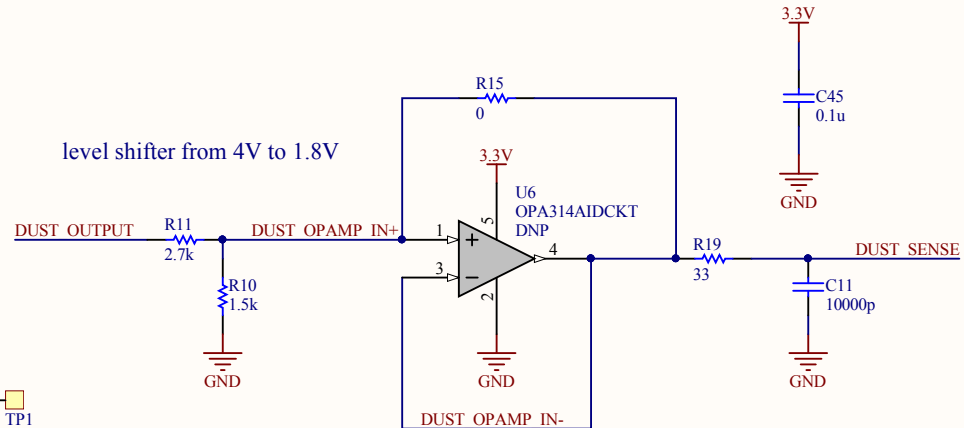
Hello

ITEM NAME		
MCU Power		
Middle Board, Proto, Sense 1.5		
ITEM NUM.		REV
530-00012-02		1
DATE	DRAWN BY	
3/23/16	H. Asgarian	
		SHEET 3 OF

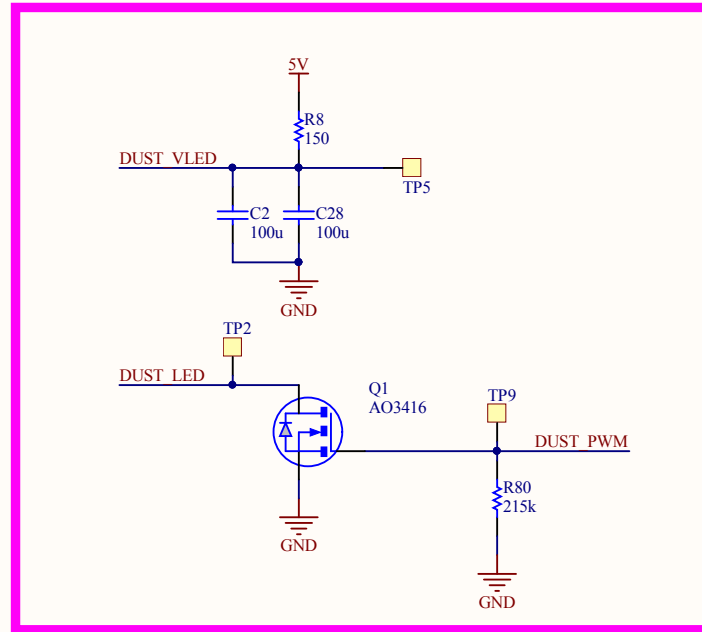
Connector for Sharp dust sensor GP2Y1010AU0F



level shifter from 4V to 1.8V



As on the GP2Y1010 datasheet



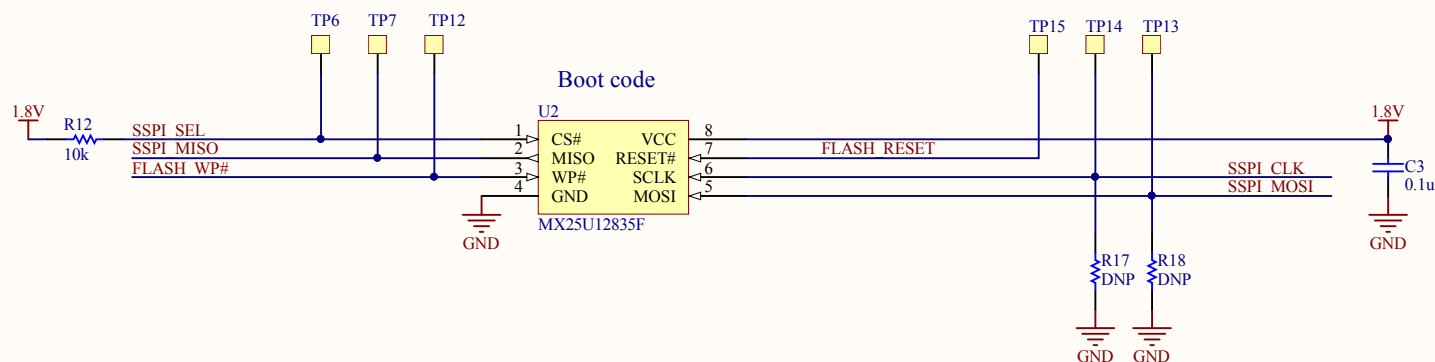
NOTICE OF PROPRIETARY PROPERTY

THE INFORMATION CONTAINED HEREIN IS THE
PROPRIETARY PROPERTY OF HELLO INC.
THE POSSESSOR AGREES TO THE FOLLOWING:

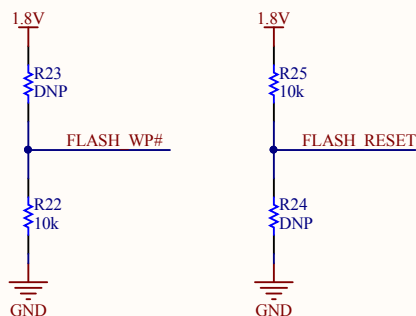
- I. TO MAINTAIN THE DOCUMENT IN CONFIDENCE
- II. NOT TO REPRODUCE OR COPY IT
- III. NOT TO REVEAL OR PUBLISH IN WHOLE OR PART

Hello

ITEM NAME Air Quality Middle Board, Proto, Sense 1.5		
ITEM NUM. 530-00012-02	REV 1	
DATE 3/23/16	DRAWN BY H. Asgarian	SHEET 4 OF 7



TI wants 17 and R18 to be installed but we've always been good without



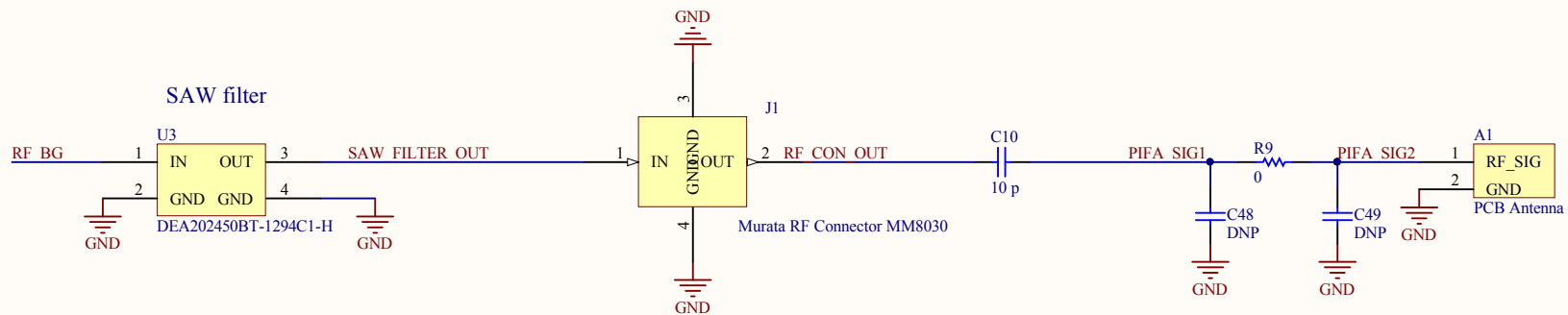
Datasheet is unclear, so for now we pull reset high and WP low

NOTICE OF PROPRIETARY PROPERTY

THE INFORMATION CONTAINED HEREIN IS THE
PROPRIETARY PROPERTY OF HELLO INC.
THE POSSESSOR AGREES TO THE FOLLOWING:

- I. TO MAINTAIN THE DOCUMENT IN CONFIDENCE
- II. NOT TO REPRODUCE OR COPY IT
- III. NOT TO REVEAL OR PUBLISH IN WHOLE OR PART

<h1>Hello</h1>		
ITEM NAME Flash Middle Board, Proto, Sense 1.5		
ITEM NUM. 530-00012-02		REV 1
DATE 3/23/16	DRAWN BY H. Asgarian	SHEET 5 OF 7



Murata 0201 GJM0335C1ER20WB01
GJM series is better than GRM for RF

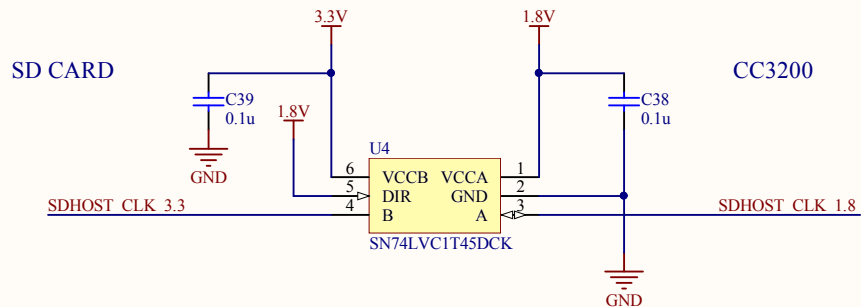
NOTICE OF PROPRIETARY PROPERTY

THE INFORMATION CONTAINED HEREIN IS THE
PROPRIETARY PROPERTY OF HELLO INC.
THE POSSESSOR AGREES TO THE FOLLOWING:

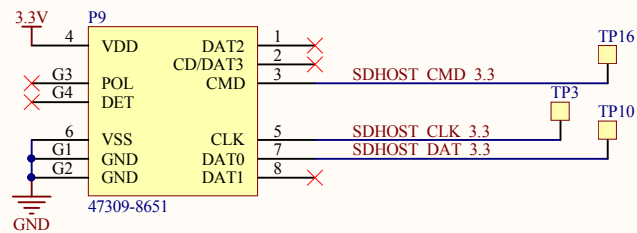
- I. TO MAINTAIN THE DOCUMENT IN CONFIDENCE
- II. NOT TO REPRODUCE OR COPY IT
- III. NOT TO REVEAL OR PUBLISH IN WHOLE OR PART

Hello		
ITEM NAME RF Middle Board, Proto, Sense 1.5		
ITEM NUM. 530-00012-02		REV 1
DATE 3/23/16	DRAWN BY H. Asgarian	SHEET 6 OF 7

CLK needs a dedicated level shifter beacuse of speed



CMD and DAT shifter on dedicated level shifter



SD Card connector

NOTICE OF PROPRIETARY PROPERTY

THE INFORMATION CONTAINED HEREIN IS THE
PROPRIETARY PROPERTY OF HELLO INC.
THE POSSESSOR AGREES TO THE FOLLOWING:

- I. TO MAINTAIN THE DOCUMENT IN CONFIDENCE
- II. NOT TO REPRODUCE OR COPY IT
- III. NOT TO REVEAL OR PUBLISH IN WHOLE OR PART

Hello

ITEM NAME SD_Card Middle Board, Proto, Sense 1.5		
ITEM NUM. 530-00012-02	REV 1	
DATE 3/23/16	DRAWN BY H. Asgarian	SHEET 7 OF 7