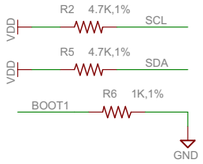
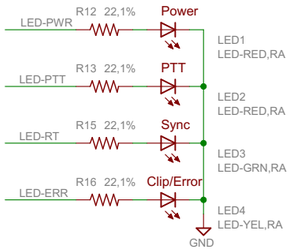
| DATE | REVISION | ECN | REV | BY |
|---|---|---|---|---|
| 04/21/14 | Added to SourceForge Repository | | | RGB |
| 04/25/14 | Pre-Release to Prototype | | A | RGB |
| 05/28/14 | Release for Review | | B | RGB |

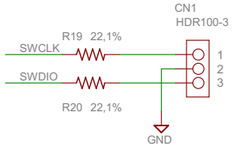
## PULLUPS & PULLDOWNS



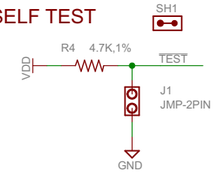

## LED's



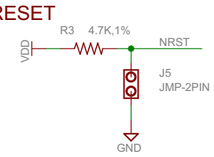

## STLINK



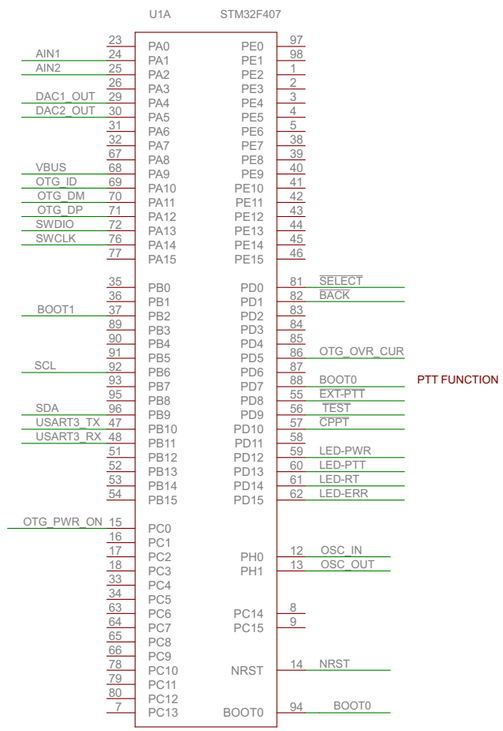

## SELF TEST



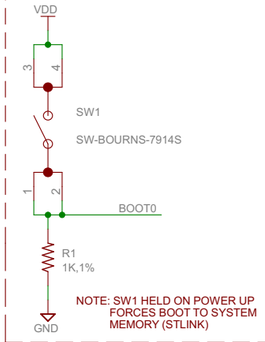

## RESET



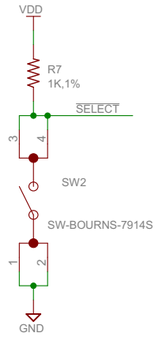

## STM32F405 CPU



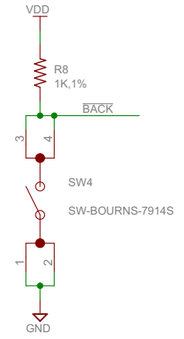

## Push To Talk (PTT)



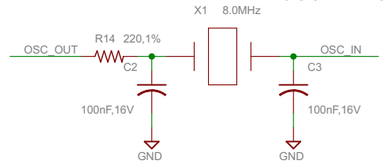

## SELECT



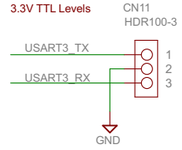

## BACK



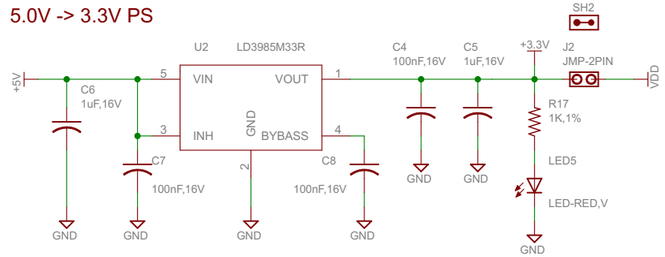

## OSCILLATOR CRYSTAL



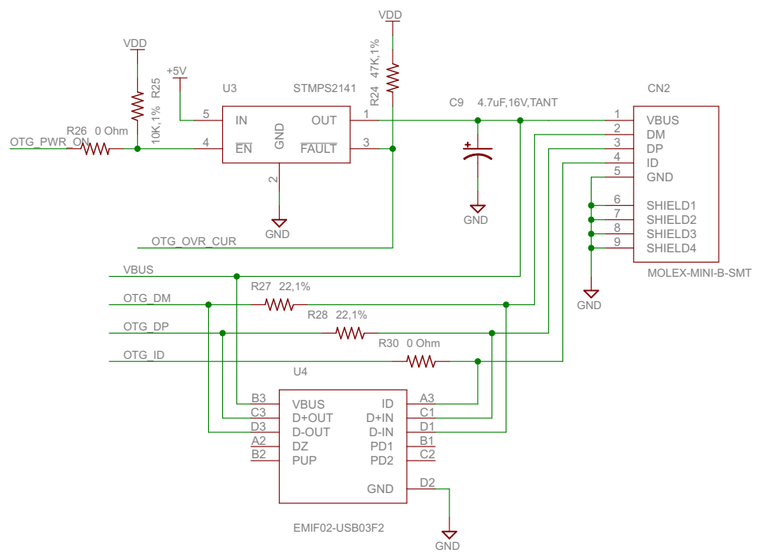

## UART



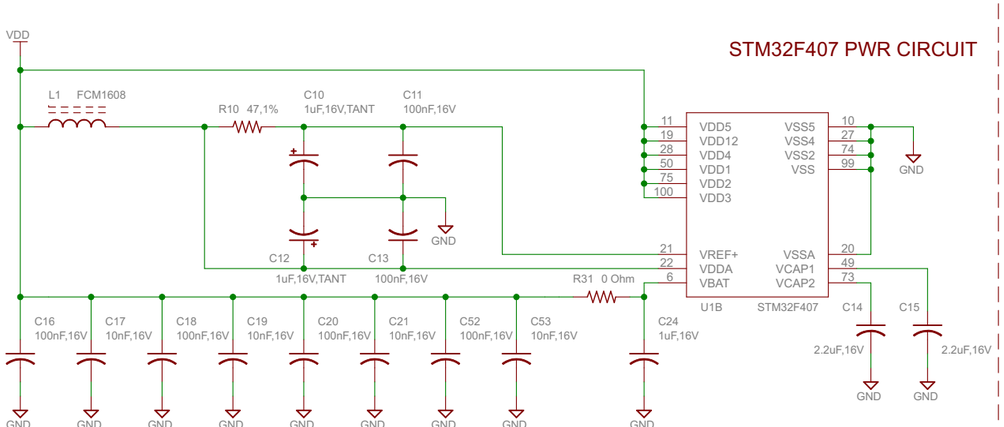

## 5.0V -> 3.3V PS




## OTG USB INTERFACE




## STM32F405 PWR CIRCUIT




PCB1
SM1000A
PRINTED CIRCUIT BOARD



# ROWETEL

TITLE: SmartMic Circuit Board

Document Number: SM1000-2L-70x90

REV: B

Date: 6/3/2014 10:08:26 PM

Sheet: 1/2

| DATE | REVISION | ECN | REV | BY |
|---|---|---|---|---|
| 04/21/14 | Added to SourceForge Repository | | | RGB |
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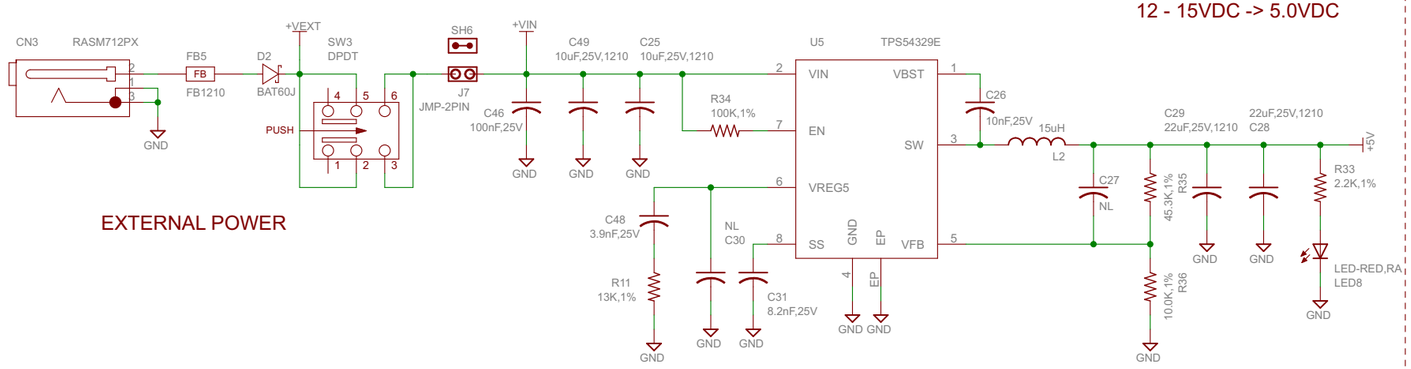
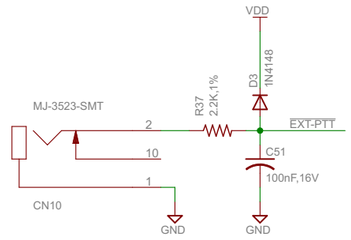
| 05/28/14 | Release for Review | | B | RGB |

## 12 - 15VDC -> 5.0VDC

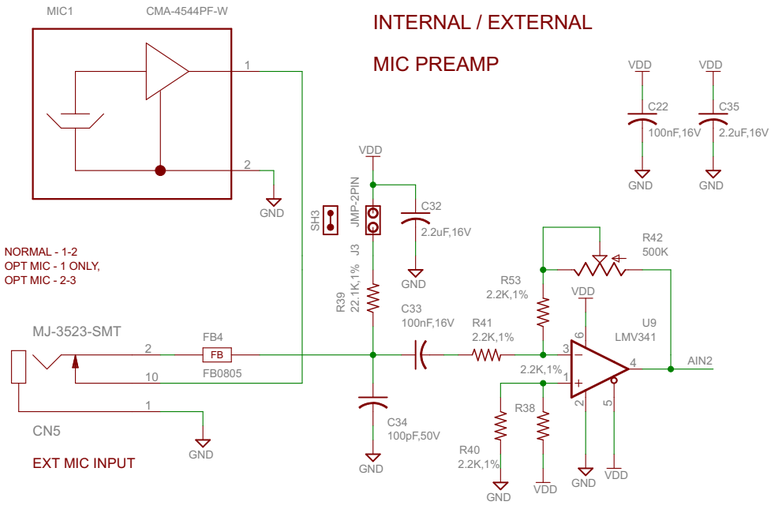



## EXTERNAL POWER

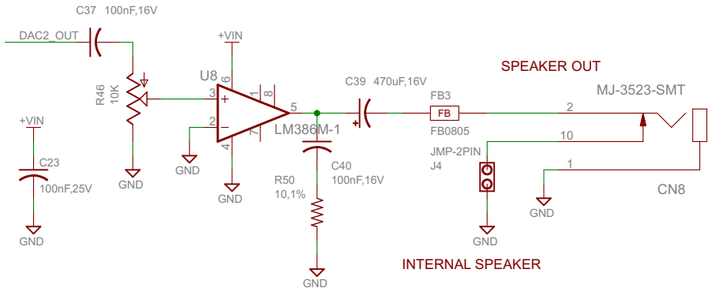
## EXT. PTT INPUT



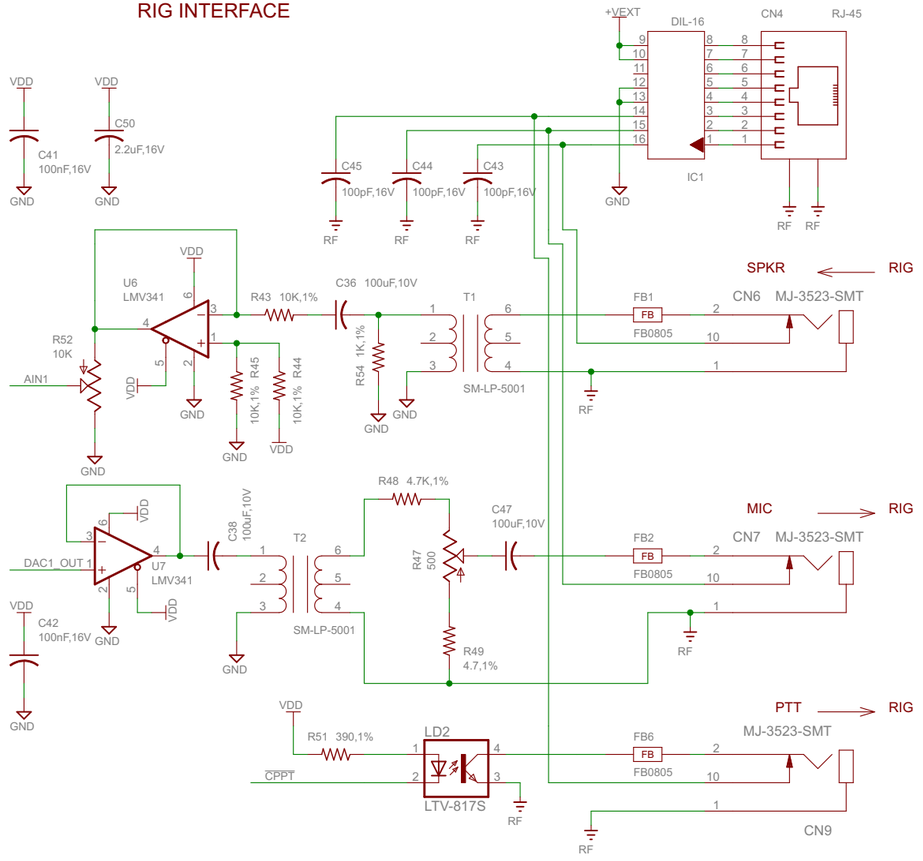

## INTERNAL / EXTERNAL MIC PREAMP




## SPEAKER AMP




## RIG INTERFACE




06/02/2014
- 21. Add SELECT & BACK switches.

06/01/2014
- 20. Delete VUSB Led & circuitry.
- 19. Delete USB fault LED & circuitry.
- 18. Delete STLINK LED & components.
- 17. Change SCL, SDA pulldowns to pullups.

05/29/2014
- 16. Change CN1 to 3-pin
- 15. Power electret mic from VDD
- 14. Change Reset switch to header.

05/28/2014
- 13 Added PTT SW network to permit DFU mode on power up.
- 12. Change C23 to 25V.
- 11. Change C43, C44, C45 to 100pF
- 10. Add hdr for speaker.
- 9. Change bypass caps to mix of 100nF and 10nF.
- 8. Change processor from STM32F407 to STM32F405.
- 7. Change PCB from 4 layer to 2 layer.
- 6. Bring GND, RF(GND) & +VEXT to IC1 connector.
- 5. Add ext. PTT connector and cpu DI.
- 4. Change mic preamp circuit to op-amp per DR.
- 3. Change rig mic amp circuit to pot on transformer output.
- 2. Move LED8 to 5V
- 1. Change U5 TPS54329E to RT8250



ROWETEL

TITLE: Smart Mic Circuit Board

Document Number: SM1000-2L-70x90 REV: B

Date: 6/3/2014 10:08:26 PM Sheet: 2/2