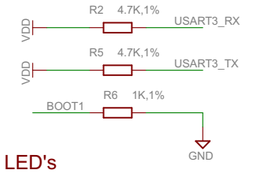
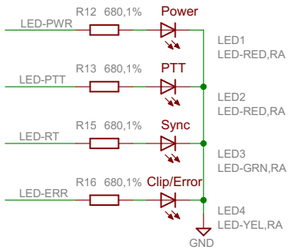
DATE	REVISION	ECN	REV	BY
04/21/14	Added to SourceForge Repository			RGB
04/25/14	Pre-Release to Prototype		A	RGB
05/28/14	Release for Review		B	RGB
06/13/14	Release for Prototype		B	RGB

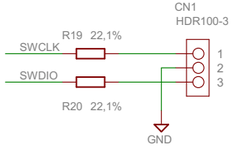
PULLUPS & PULLDOWNS



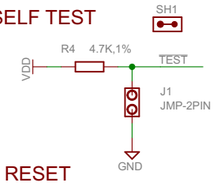
LED's



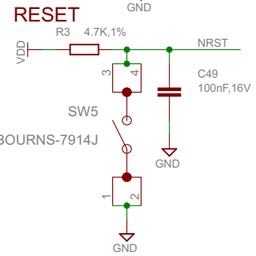
STLINK

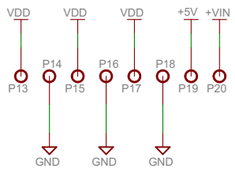


SELF TEST

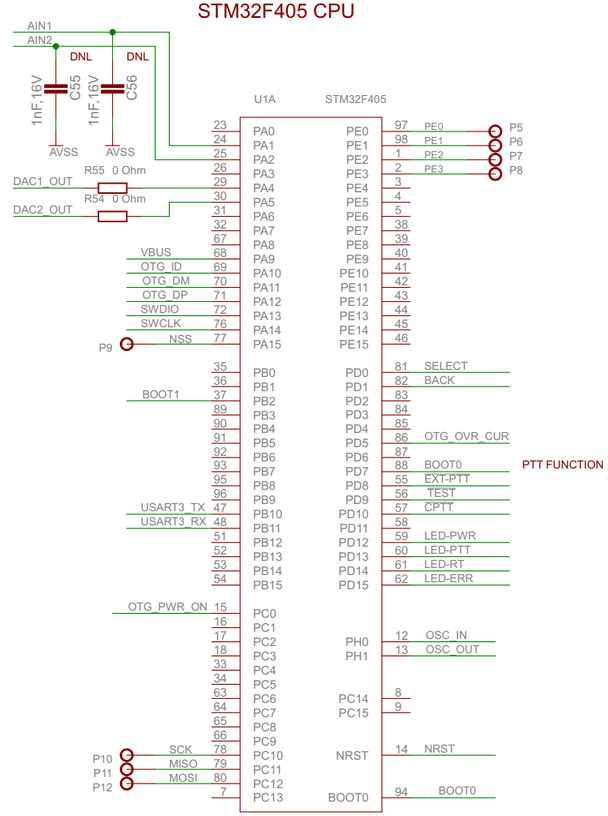


RESET

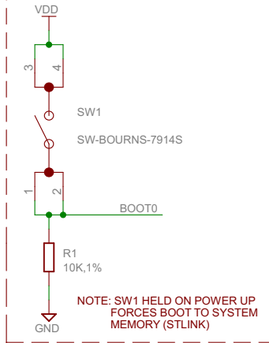




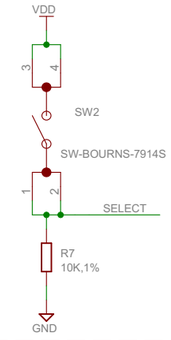
STM32F405 CPU



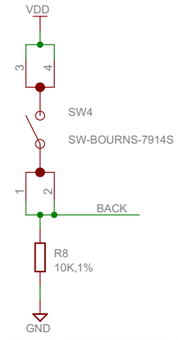
Push To Talk (PTT)



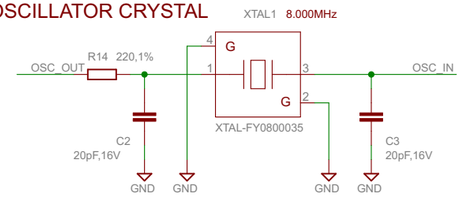
SELECT



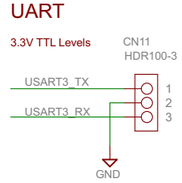
BACK



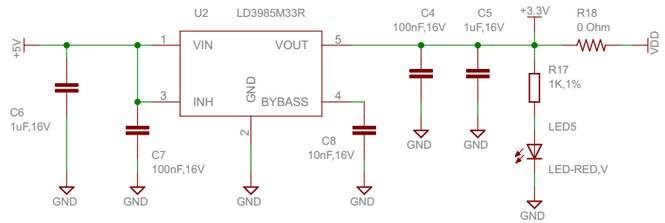
OSCILLATOR CRYSTAL



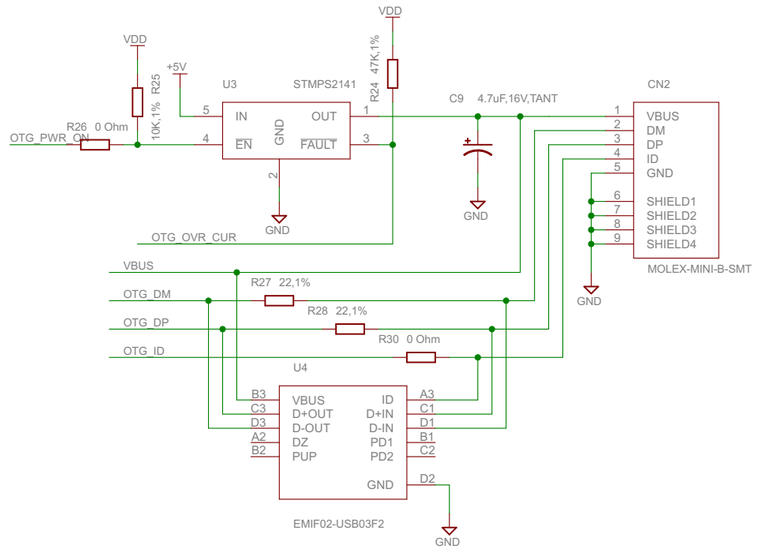
UART



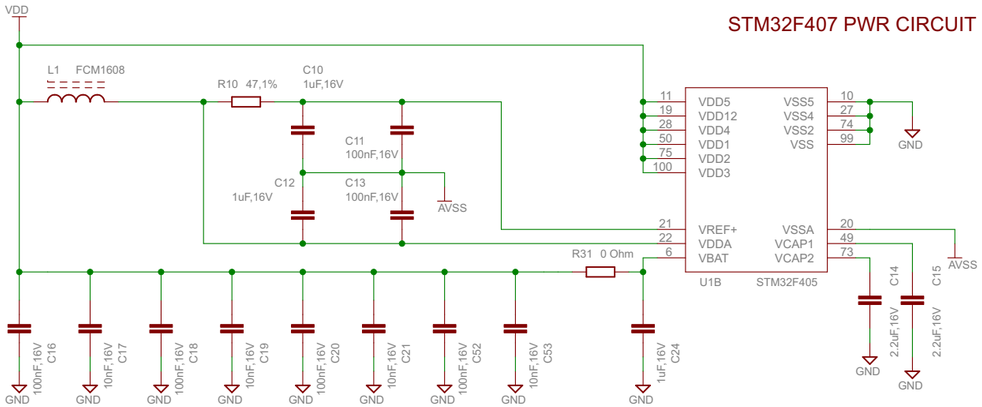
5.0V -> 3.3V PS



OTG USB INTERFACE



STM32F407 PWR CIRCUIT



Note: All non-polarized capacitors packages are 0603 unless otherwise noted.
Note: All resistor packages are 0603 unless otherwise noted.

PCB1
SM1000A
PRINTED CIRCUIT BOARD

ROWETEL

TITLE: SmartMic Circuit Board

Document Number: SM1000-C

REV: B

Date: 9/26/2014 2:32:59 PM

Sheet: 1/2

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
06/13/14	Release for Prototype		B	RGB

EXTERNAL POWER

12 - 15VDC -> 5.0VDC

CN3 RASM722PX, 100uH L3, D2 BAT60J, SW3 DPDT, PUSH, C30 10nF,25V, C1 1nF,25V, R21 0 Ohm, C46 22uF,25V, C25 1210 100nF,25V, +VIN, R34 10K,1%, U5 TPS54329E (VIN, VBST, EN, SW, VREG5, SS, GND, EP, VFB), C26 100nF,25V, 4.7uH L2, C27 20pF,16V, C29 10uF,25V,1206, C28 10uF,25V,1206, +5V, R35 124.0K,1%, R36 22.1K,1%, R33 2.2K,1%, LED-RED,RA LED8, C48 470nF,25V, C31 8.2nF,25V, GND

EXT. PTT INPUT

MJ-3523-SMT, CN10, R37 2.2K,1%, BAT60J D3, VDD, EXT-PTT, C51 100nF,16V, GND

INTERNAL / EXTERNAL MIC PREAMP

MIC1 CMA-4544PF-W

NORMAL - 1-2
OPT MIC - 1 ONLY,
OPT MIC - 2-3

SH3 JMP-2PIN, J3, R39 2.21K,1%, C32 2.2uF,16V, AVDD, AVSS, C22 100nF,16V, C35 2.2uF,16V, R42 500K, C54 1nF,16V, R53 2.2K,1%, R41 2.2K,1%, R38, R40 2.2K,1%, U9 LMV341, R29 1.5K,1%, AIN2, P4, C33 100nF,16V, C34 1nF,25V, R11 100,1%, FB4 FB FB0805, MJ-3523-SMT, CN5, EXT MIC INPUT

RIG INTERFACE

C41 100nF,16V, C50 2.2uF,16V, R23 10K,1%, U6 LMV341, R9 1.5K,1%, AIN1, P1, R43 10K,1%, C36 100uF,10V, R52 1K, T1, SM-LP-5001, R45 10K,1%, R44 10K,1%, C45 100pF,50V, C44 100pF,50V, C43 100pF,50V, RF, CN12 HRS-DF11-16DS, CN4 RJ-45, SPKR, RIG, SJ-3524-SMT, FB1 FB FB0805, CN6

U7 LMV341, DAC1_OUT, P2, C38 100uF,10V, T2, SM-LP-5001, R48 4.7K,1%, R47 500, C47 100uF,10V, C42 100nF,16V, MIC, RIG, CN7 MJ-3523-SMT, FB2 FB FB0805

VDD, R51 390,1%, LD2, LTV-817S, CPTT, PTT, RIG, MJ-3523-SMT, FB6 FB FB0805, CN9

SPEAKER AMP

P3, DAC2_OUT, C37 100nF,16V, R22 22.1K,1%, R46 100K, +VIN, U8 LM386M-1, C39 220uF,25V, C57, C40 47nF,25V, R50 10,1%, C23 100nF,25V, SPEAKER OUT, FB3 FB FB0805, JMP-2PIN J4, SJ-3524-SMT, CN8, INTERNAL SPEAKER

VDD, AVDD, P21, P24, P22, P23, GND, AVSS

ROWETEL

TITLE: Smart Mic Circuit Board

Document Number: SM1000-C

REV: B

Date: 9/26/2014 2:32:59 PM

Sheet: 2/2