

8

7

6

5

4

3

2

1

1. ALL RESISTANCE VALUES ARE IN OHMS, 0.1 WATT +/- 5%.

2. ALL CAPACITANCE VALUES ARE IN MICROFARADS.

3. ALL CRYSTALS & OSCILLATOR VALUES ARE IN HERTZ.

REV

ZONE

ECN

DESCRIPTION OF CHANGE

CK  
APPD

DATE

ENG  
APPD

DATE

02

38403

ENGINEERING RELEASED

06/01/05

05

SCHEM, SPRINT, Q16C

06/01/2005

C

B

A

PAGE

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2

3

4

CONTENTS

TITLE PAGE AND CONTENTS

BACK UP BATTERY

CONSTRAINTS

COMPONENT LOCATIONS

PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	BOM OPTION
051-6846	1	SCHEM,SPRINT,Q16B	SCH1	
820-1819	1	PCBF,SPRINT,Q16B	PCB1	

DIMENSIONS ARE IN MILLIMETERS


XX : \_\_\_\_\_

X.XX : \_\_\_\_\_

X.XXX : \_\_\_\_\_

ANGLES : \_\_\_\_\_

DO NOT SCALE DRAWING



THIRD ANGLE PROJECTION

METRIC

DRAFTER

ENG APPD

QA APPD

RELEASE

DESIGN CK

MFG APPD

DESIGNER

SCALE


SIZE

D

MATERIAL/FINISH

NOTED AS

APPLICABLE

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TITLE

SCHEME , SPRINT , Q16C

DRAWING NUMBER

051-6846

REV.

02

SHT

1

OF

5

8

7

6

5

4

3

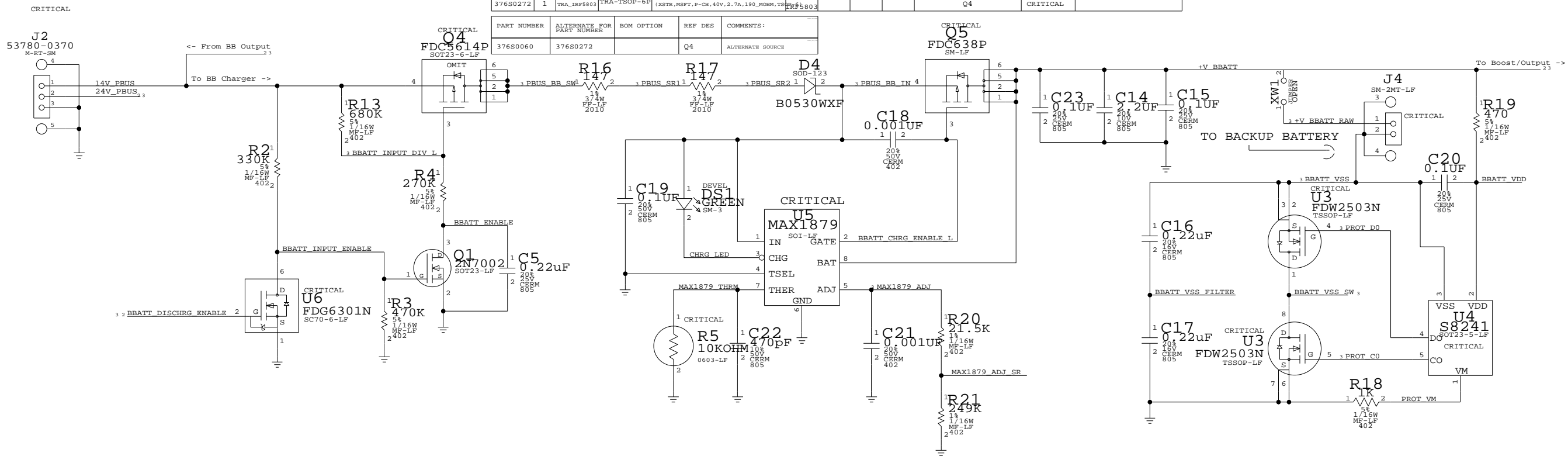
2

1

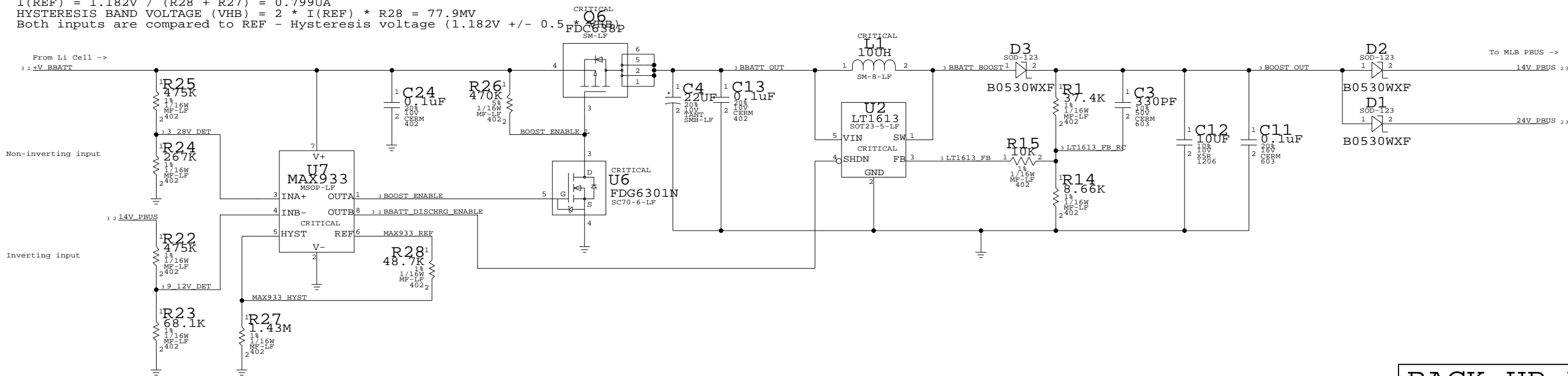
# BACKUP BATTERY CHARGER

PART #	QTY	DEVICE	PACKAGE	DESCRIPTION	VALUE	VOLT.	WATT.	TOL.	REFERENCE DESIGNATOR(S)	CRITICAL	BOM OPTION
376S0272	1	TRA_IRF5803	TRA-TSOP-6P	(XSTR,MSPT,P-CH,40V,2.7A,190_MCHM,T9818)IRF5803					Q4	CRITICAL	

PART NUMBER	ALTERNATE FOR PART NUMBER	BOM OPTION	REF DES	COMMENTS:
376S0060	376S0272		Q4	ALTERNATE SOURCE



$I(REF) = 1.182V / (R28 + R27) = 0.799\mu A$   
HYSTERESIS BAND VOLTAGE (VHB) =  $2 * I(REF) * R28 = 77.9mV$   
Both inputs are compared to REF - Hysteresis voltage (1.182V +/- 0.5%)



## BACK UP BATTERY

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

















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SIZE	DRAWING NUMBER	REV.
D	051-6846	02
SCALE	SHT	OF
NONE	2	5

REVISION HISTORY

02/21/05 - SCHEMATIC ORIGINATED FROM Q41B 051-6753-A  
02/23/05 - CORRECTED THE NOTE

Power Signals

GROUP	SIG_NAME	VOLTAGE	MIN_LINE_WIDTH	MIN_NECK_WIDTH
BATTERY	 24V_FBUS	VOLTAGE=24V	MIN_LINE_WIDTH=0.508MM	MIN_NECK_WIDTH=0.254MM
	 14V_FBUS	VOLTAGE=14V	MIN_LINE_WIDTH=0.508MM	MIN_NECK_WIDTH=0.254MM
	 FBUS_BB_IN	VOLTAGE=14V	MIN_LINE_WIDTH=0.508MM	MIN_NECK_WIDTH=0.254MM
	 FBUS_SR2	VOLTAGE=14V	MIN_LINE_WIDTH=0.508MM	MIN_NECK_WIDTH=0.254MM
	 FBUS_SR1	VOLTAGE=14V	MIN_LINE_WIDTH=0.508MM	MIN_NECK_WIDTH=0.254MM
	 FBUS_BB_SW	VOLTAGE=14V	MIN_LINE_WIDTH=0.508MM	MIN_NECK_WIDTH=0.254MM
	 +V_BBATT	VOLTAGE=4.2V	MIN_LINE_WIDTH=0.508MM	MIN_NECK_WIDTH=0.254MM
	 +V_BBATT_RAW	VOLTAGE=4.2V	MIN_LINE_WIDTH=0.508MM	MIN_NECK_WIDTH=0.254MM
	 BBATT_VSS	VOLTAGE=0V	MIN_LINE_WIDTH=0.508MM	MIN_NECK_WIDTH=0.254MM
	 BBATT_VSS_SW	VOLTAGE=0V	MIN_LINE_WIDTH=0.508MM	MIN_NECK_WIDTH=0.254MM
MAX1879	 MAX1879_ADJ	VOLTAGE=1.4V	MIN_LINE_WIDTH=0.203MM	MIN_NECK_WIDTH=0.254MM
	 BBATT_INPUT_DIV_L	VOLTAGE=14V	MIN_LINE_WIDTH=0.508MM	MIN_NECK_WIDTH=0.254MM
S8241	 PRQT_D0	VOLTAGE=4.2V	MIN_LINE_WIDTH=0.203MM	MIN_NECK_WIDTH=0.254MM
	 PRQT_C0	VOLTAGE=4.2V	MIN_LINE_WIDTH=0.203MM	MIN_NECK_WIDTH=0.254MM
	 9_12V_DET	VOLTAGE=1.2V	MIN_LINE_WIDTH=0.203MM	MIN_NECK_WIDTH=0.508MM
MAX933	 3_28V_DET	VOLTAGE=1.2V	MIN_LINE_WIDTH=0.203MM	MIN_NECK_WIDTH=0.254MM
	 BOOST_ENABLE	VOLTAGE=4.2V	MIN_LINE_WIDTH=0.203MM	MIN_NECK_WIDTH=0.254MM
	 BBATT_DISCHRG_ENABLE	VOLTAGE=4.2V	MIN_LINE_WIDTH=0.203MM	MIN_NECK_WIDTH=0.254MM
LT1613	 BBATT_OUT	VOLTAGE=4.2V	MIN_LINE_WIDTH=0.508MM	MIN_NECK_WIDTH=0.254MM
	 BBATT_BOOST	VOLTAGE=6.5V	MIN_LINE_WIDTH=0.508MM	MIN_NECK_WIDTH=0.254MM
	 BOOST_OUT	VOLTAGE=6.5V	MIN_LINE_WIDTH=0.508MM	MIN_NECK_WIDTH=0.254MM
	 LT1613_FB	VOLTAGE=1.3V	MIN_LINE_WIDTH=0.203MM	MIN_NECK_WIDTH=0.254MM
	 LT1613_FB_RC	VOLTAGE=1.3V	MIN_LINE_WIDTH=0.203MM	MIN_NECK_WIDTH=0.254MM
	 GND	VOLTAGE=0V	MIN_LINE_WIDTH=0.508MM	MIN_NECK_WIDTH=0.254MM

SIGNAL CONSTRAINTS

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D	051-6846		02
SCALE	SHT	OF	
NONE	3	5	

