

R7F0C3056 Target board

YRCNR7F0C3056-TB

Rev 1.00 2013.4

The YRCNR7F0C3056-TB is a target board used for evaluating microcontroller operations, using the Minicube2/EZ-CUBE, the on-chip debug emulator with programming function.

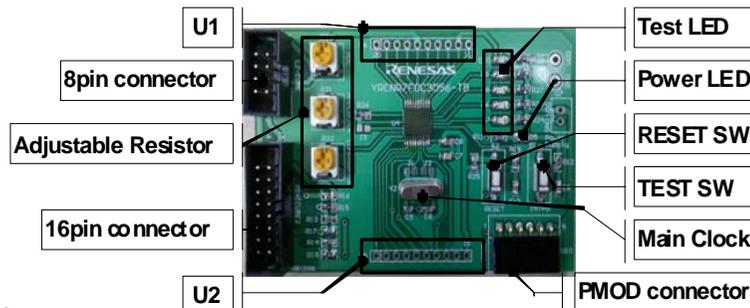
(1) R7F0C3056 target board(YRCNR7F0C3056-TB) features

- Incorporates R7F0C3056.
- A 10MHz resonator mounted as main clock, high-speed operation enabled(@2.7 to 5.5V)
- Supports both flash memory programming and on-chip debugging (using TOOLC0 and TOOLD0 pin)
- Highly extendable; peripheral board connectors are equipped with microcontroller pins

(2) Hardware specifications

CPU R7F0C3056	Main clock operation frequency	10MHz (mounted on board)
Embedded parts	U1,U2:Peripheral board connectors (2.54mm pitch),10-pin socket x 2(Pad only)	
	MINICUBE2:16-pin connector (for Minicube2 connection)	
	EZ-CUBE:8-pin connector (for EZ-CUBE connection)	
	PowerLED: Red x 1 (D5)	
	Test LED: Yellow x 5 (D6 connected to P33, D7 connected to P34, D8 connected to P25), D9 connected to P26), D10 connected to P27)	
	RESET SW: S1 (connected to RESET)	
	TEST SW: S2 (connected to INTPO)	
	Adjustable Resistor: ADC (connected to ANI3),CMPARATOR (connected to CMPIN), AMPLIFIER (connected to AMP+)	
	Main clock:10MHz resonator (connected to X1 and X2)	
	PMOD: 6pin connector	
Operating voltage	2.7 to 5.5 V	

(3) Dimensions and parts layout



(4) Notes on use

- Renesas Electronics will not provide any support for this board.

R7F0C3056 目标板

YRCNR7F0C3056-TB

Rev 1.00 2013.4

YRCNR7F0C3056-TB 是使用Minicube2/EZ-CUBE, 具有编程功能的在线调试器进行仿真操作的目标板。

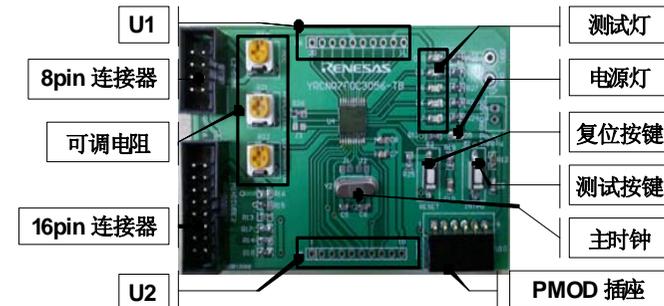
(1) R7F0C3056 目标板(YRCNR7F0C3056-TB) 特征

- 包含 R7F0C3056.
- 焊有10MHz 振荡器作为主时钟, 可实现高速操作 (@2.7 to 5.5V)
- 支持flash 存储器编程和在线调试 (使用 TOOLC0 和 TOOLD0 引脚)
- 可扩展;外设连接接口, 由芯片的各引脚的引出

(2) 硬件说明

CPU R7F0C3056	主时钟操作频率	10MHz (焊于板上)
部件	U1,U2:外设连接接口 (2.54mm pitch),10-pin 插座x2(仅有焊盘)	
	MINICUBE2:16-pin 连接器(用于Minicube2 连接)	
	EZ-CUBE:8-pin连接器 (用于 EZ-CUBE 连接)	
	电源灯: 红 x 1 (D5)	
	测试灯: 黄 x 5 (D6 连接到 P33, D7连接到 P34, D8连接到 P25), D9连接到 P26), D10连接到 P27)	
	复位按键: S1 (连接到 RESET)	
	测试按键: S2 (连接到 INTPO)	
	可调电阻: ADC(连接到ANI3),CMPARATOR (连接到CMPIN), AMPLIFIER(连接到 AMP+)	
	主时钟:10MHz 振荡器(连接到 X1 和 X2)	
	PMOD: 6pin连接器	
操作电压	2.7 ~ 5.5 V	

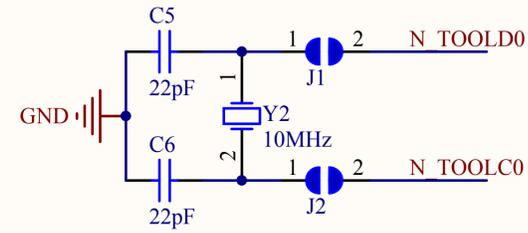
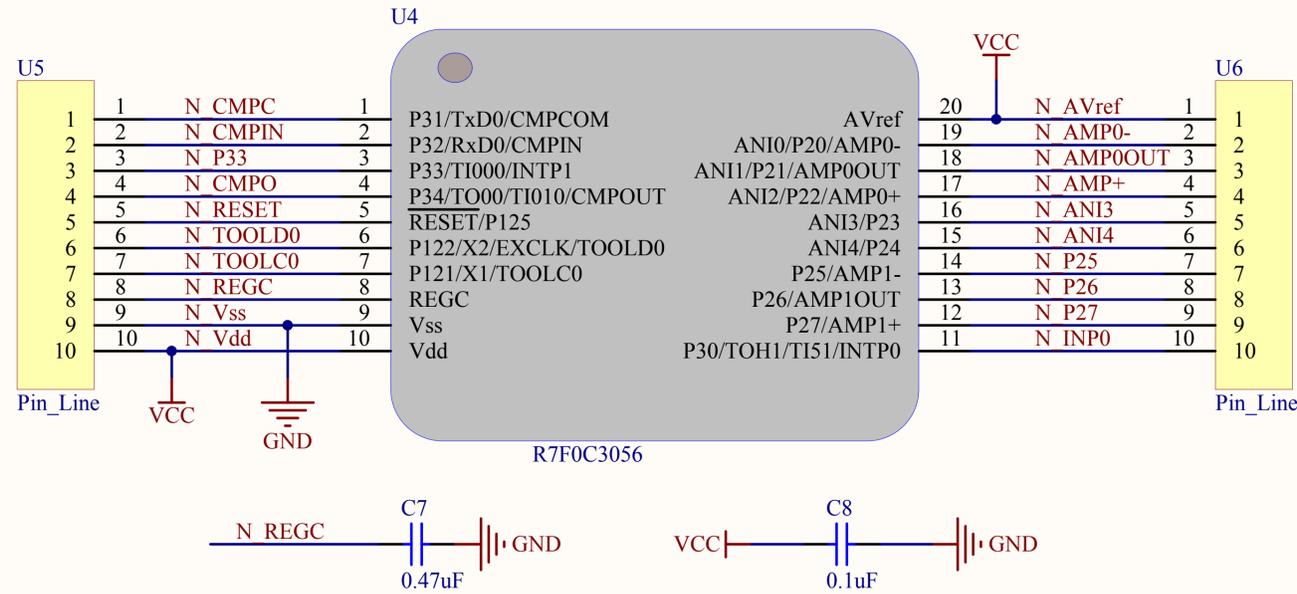
(3) 各部件布局



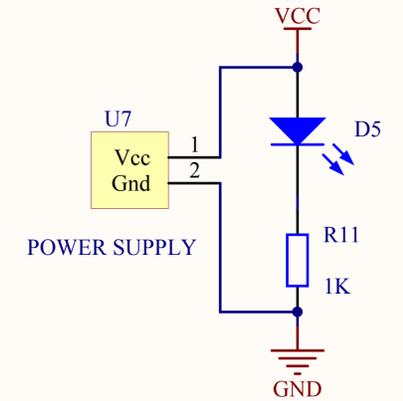
(4) 注意事项

- 瑞萨电子对此板不提供技术支持。

Control MCU R7F0C3056

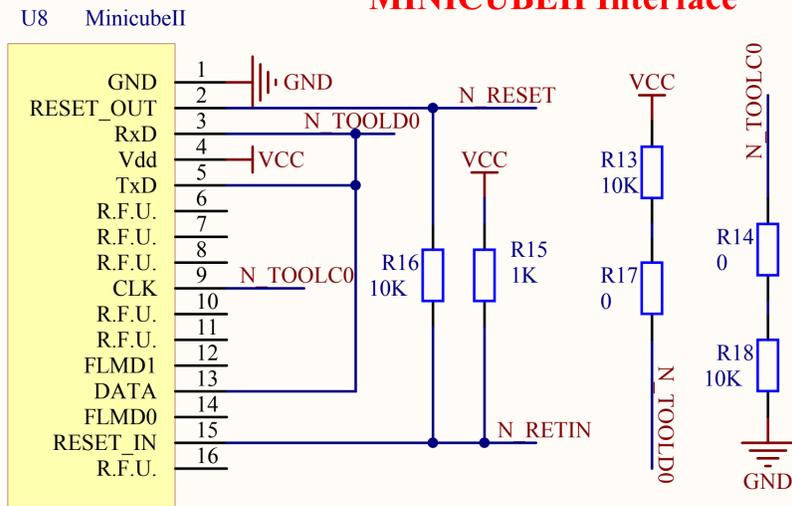


Oscillation

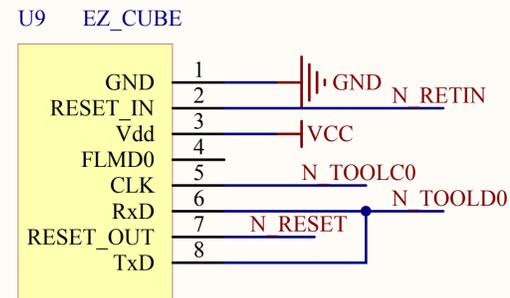


Power Supply Interface

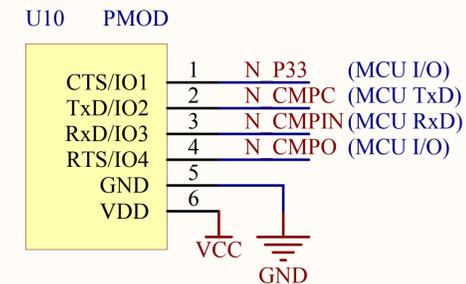
MINICUBEII Interface



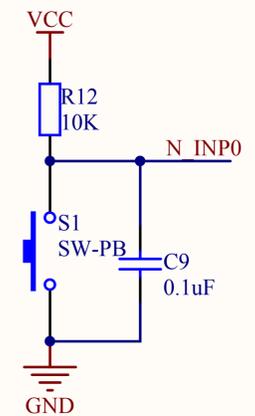
EZ_CUBE Interface



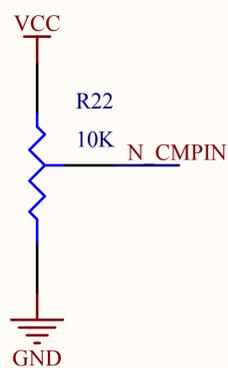
PMOD Interface



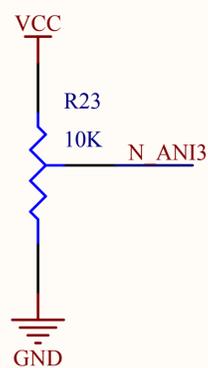
Selection Key



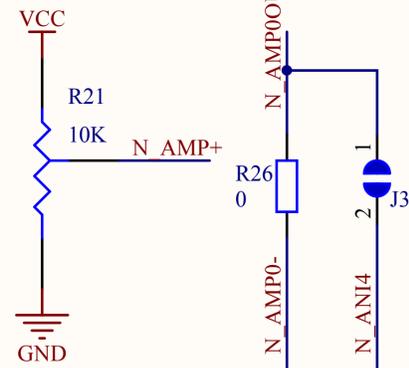
Comparator



A/D Inverter

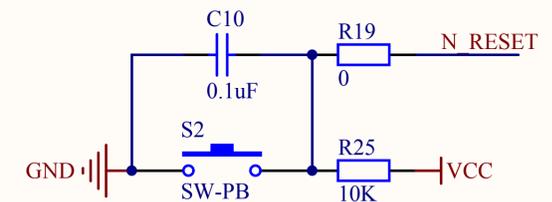
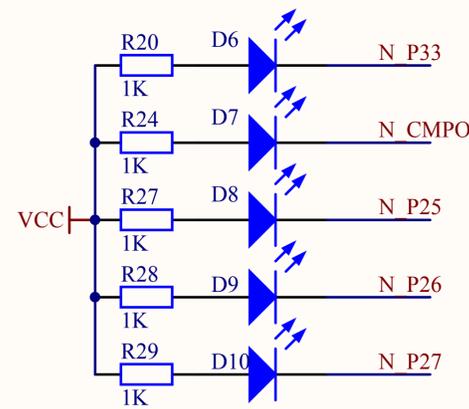


Amplifier



Used as voltage follower

Indicator LED



RESET Key

Title		
YRCNR7F0C3056-TB		
Size	Number	Revision
A4		
Date:	2013-3-7	Sheet of
File:		Drawn By: