

RL78/G14 Fast Prototyping Board Schematic
 (Product No: RTK5RLG140C00000BJ)

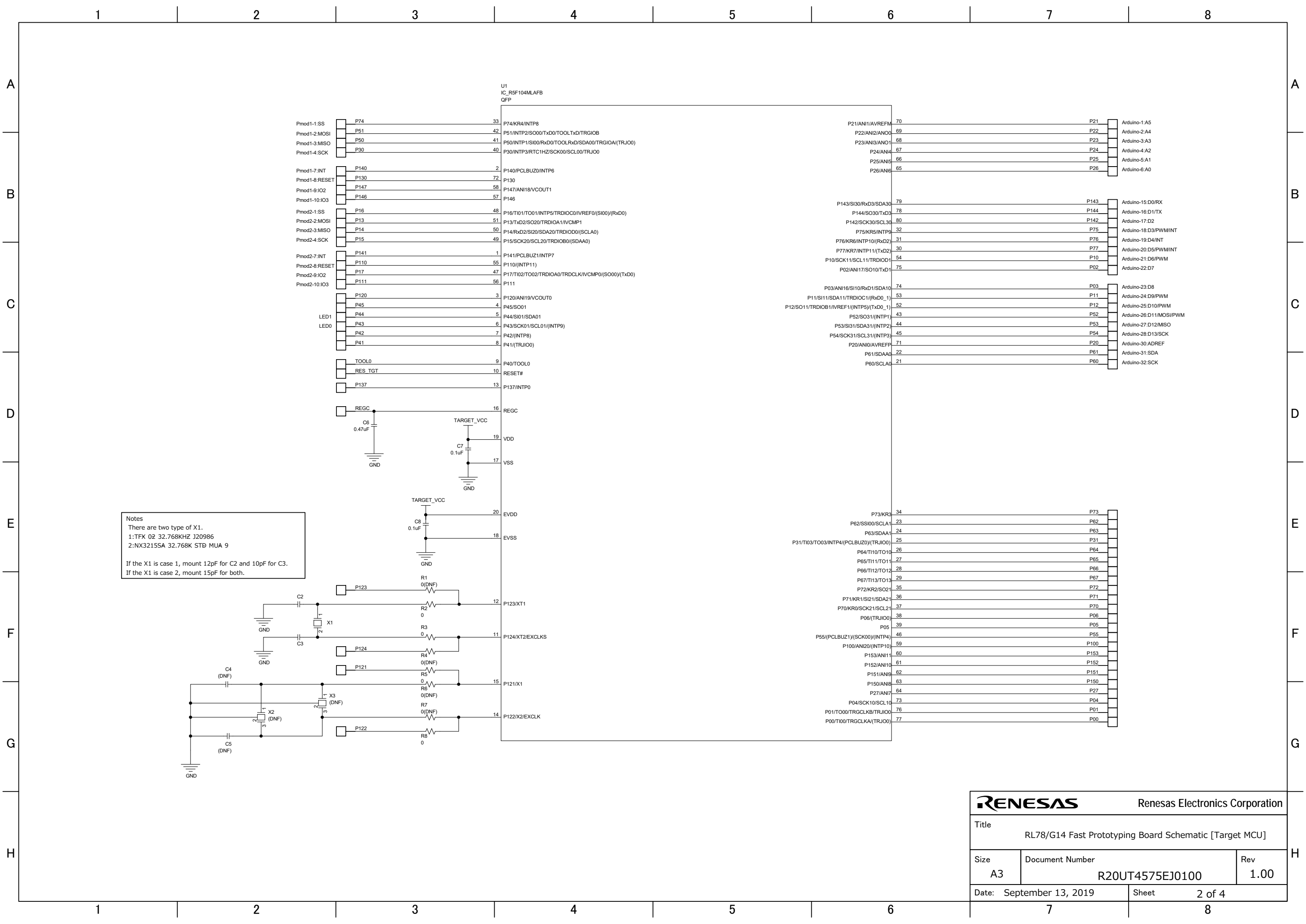
PAGE	DESCRIPTION
1	Index
2	Target MCU
3	Target MCU peri, Power
4	Emulator Circuit

Note:

- C : Capacitor
- D : Diode
- R : Fixed Resistor
- U : Integrated Circuit
- X : Crystal, Oscillator
- SW : Switch
- LED : Light Emitting Diode
- J : Connector
- N.C. : Not connected
- ⊖ SS:short-pad short-type(Default:short)
- ⊖ SC:short-pad cut-type(Default:Open)

* "DNF" marking means that component is not fitted by default.

RENESAS		Renesas Electronics Corporation	
Title RL78/G14 Fast Prototyping Board Schematic [Index]			
Size A3	Document Number R20UT4575EJ0100	Rev 1.00	
Date: September 13, 2019		Sheet	1 of 4



Notes
 There are two type of X1.
 1:TFX 02 32.768KHZ J20986
 2:NX3215SA 32.768K STD MUA 9
 If the X1 is case 1, mount 12pF for C2 and 10pF for C3.
 If the X1 is case 2, mount 15pF for both.

U1
 IC_R5F104MLAFB
 QFP

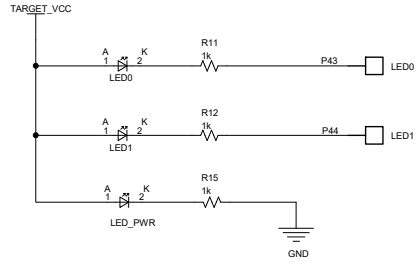
Pmod1-1:SS	P74	33	P74/KR4/INTP8
Pmod1-2:MOSI	P51	42	P51/INTP2/SO00/TxD0/TOOLTxD/TRGIOB
Pmod1-3:MISO	P50	41	P50/INTP1/SI00/RxD0/TOOLRxD/SDA00/TRGIOA/TRJ00
Pmod1-4:SCK	P30	40	P30/INTP3/RTC1HZ/SCK00/SCL00/TRJ00
Pmod1-7:INT	P140	2	P140/PCLBUZ0/INTP6
Pmod1-8:RESET	P130	72	P130
Pmod1-9:IO2	P147	58	P147/ANI18/VCOU1
Pmod1-10:IO3	P146	57	P146
Pmod2-1:SS	P16	48	P16/TI01/TO01/INTP5/TRDIOC0/IVREF0/(SI00)/(RxD0)
Pmod2-2:MOSI	P13	51	P13/TxD2/SO20/TRDIOA1/IVCMP1
Pmod2-3:MISO	P14	50	P14/RxD2/SI20/SDA20/TRDIOD0/(SCLA0)
Pmod2-4:SCK	P15	49	P15/SCK20/SCL20/TRDIOB0/(SDAA0)
Pmod2-7:INT	P141	1	P141/PCLBUZ1/INTP7
Pmod2-8:RESET	P110	55	P110/(INTP11)
Pmod2-9:IO2	P17	47	P17/TI02/TO02/TRDIOA0/TRDCLK/IVCMP0/(SO00)/(TxD0)
Pmod2-10:IO3	P111	56	P111
LED1	P120	3	P120/ANI19/VCOU0
LED0	P45	4	P45/SO01
	P44	5	P44/SI01/SDA01
	P43	6	P43/SCK01/SCL01/(INTP9)
	P42	7	P42/(INTP8)
	P41	8	P41/(TRJIO0)
	TOOL0	9	P40/TOOL0
	RES_TGT	10	RESET#
	P137	13	P137/INTP0

P21/ANI1/AVREFM	P21	70	Arduino-1:A5
P22/ANI2/AN00	P22	69	Arduino-2:A4
P23/ANI3/AN01	P23	68	Arduino-3:A3
P24/ANI4	P24	67	Arduino-4:A2
P25/ANI5	P25	66	Arduino-5:A1
P26/ANI6	P26	65	Arduino-6:A0
P143/SI30/RxD3/SDA30	P143	79	Arduino-15:D0/RX
P144/SO30/TxD3	P144	78	Arduino-16:D1/TX
P142/SCK30/SCL30	P142	80	Arduino-17:D2
P75/KR5/INTP9	P75	32	Arduino-18:D3/PWMINT
P76/KR6/INTP10/(RxD2)	P76	31	Arduino-19:D4/INT
P77/KR7/INTP11/(TxD2)	P77	30	Arduino-20:D5/PWMINT
P10/SCK11/SCL11/TRDIOD1	P10	54	Arduino-21:D6/PWM
P02/ANI17/SO10/TxD1	P02	75	Arduino-22:D7
P03/ANI16/SI10/RxD1/SDA10	P03	74	Arduino-23:D8
P11/SI11/SDA11/TRDIOC1/(RxD0_1)	P11	53	Arduino-24:D9/PWM
P12/SO11/TRDIOB1/IVREF1/(INTP5)/(TxD0_1)	P12	52	Arduino-25:D10/PWM
P52/SO31/(INTP1)	P52	43	Arduino-26:D11/MOSI/PWM
P53/SI31/SDA31/(INTP2)	P53	44	Arduino-27:D12/MISO
P54/SCK31/SCL31/(INTP3)	P54	45	Arduino-28:D13/SCK
P20/ANI0/AVREFP	P20	71	Arduino-30:ADREF
P61/SDAA0	P61	22	Arduino-31:SDA
P60/SCLA0	P60	21	Arduino-32:SCK

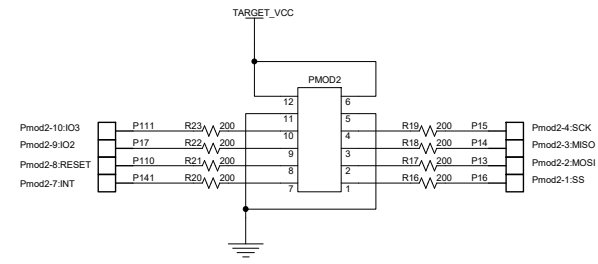
P73/KR3	P73	34	
P62/SS00/SCLA1	P62	23	
P63/SDAA1	P63	24	
P31/TI03/TO03/INTP4/(PCLBUZ0)/(TRJIO0)	P31	25	
P64/TI10/TO10	P64	26	
P65/TI11/TO11	P65	27	
P66/TI12/TO12	P66	28	
P67/TI13/TO13	P67	29	
P72/KR2/SO21	P72	35	
P71/KR1/SI21/SDA21	P71	36	
P70/KR0/SCK21/SCL21	P70	37	
P06/(TRJIO0)	P06	38	
P05	P05	39	
P55/(PCLBUZ1)/(SCK00)/(INTP4)	P55	46	
P100/ANI20/(INTP10)	P100	59	
P153/ANI11	P153	60	
P152/ANI10	P152	61	
P151/ANI9	P151	62	
P150/ANI8	P150	63	
P27/ANI7	P27	64	
P04/SCK10/SCL10	P04	73	
P01/TO00/TRGCLKB/TRJIO0	P01	76	
P00/TI00/TRGCLKA/(TRJIO0)	P00	77	

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Title RL78/G14 Fast Prototyping Board Schematic [Target MCU]			
Size A3	Document Number R20UT4575EJ0100	Rev 1.00	
Date: September 13, 2019		Sheet 2 of 4	

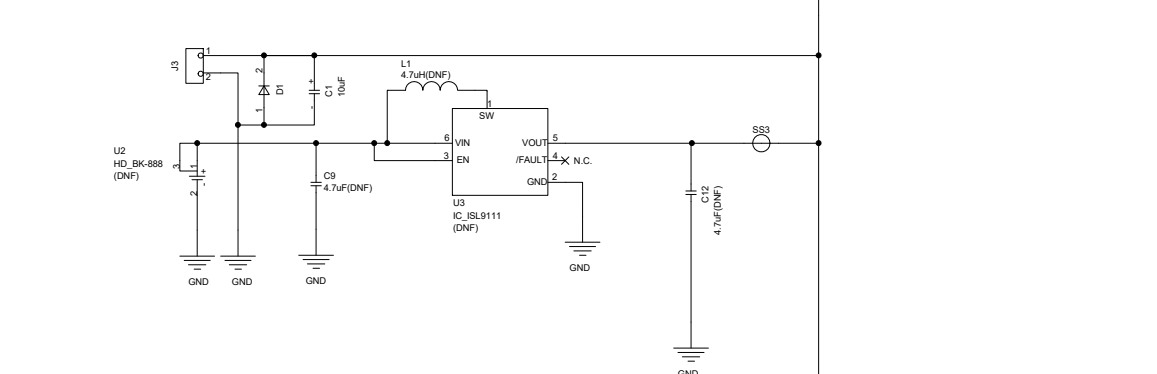
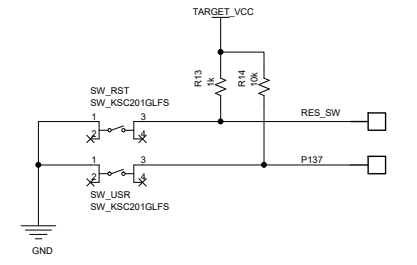
LED



Pmod



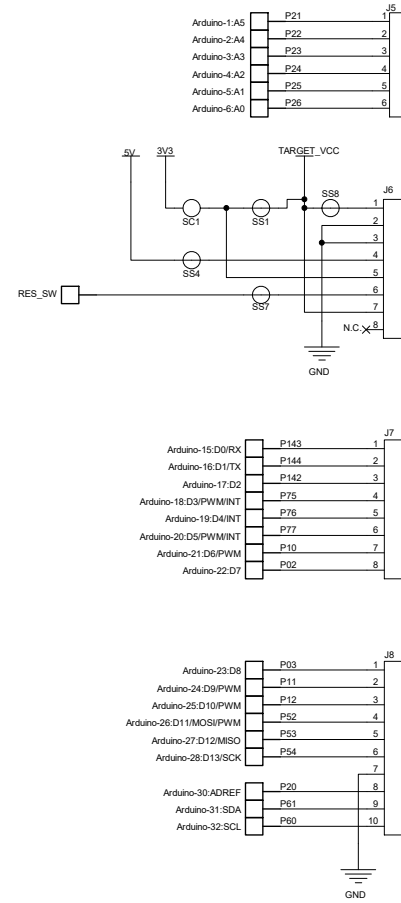
SWITCH



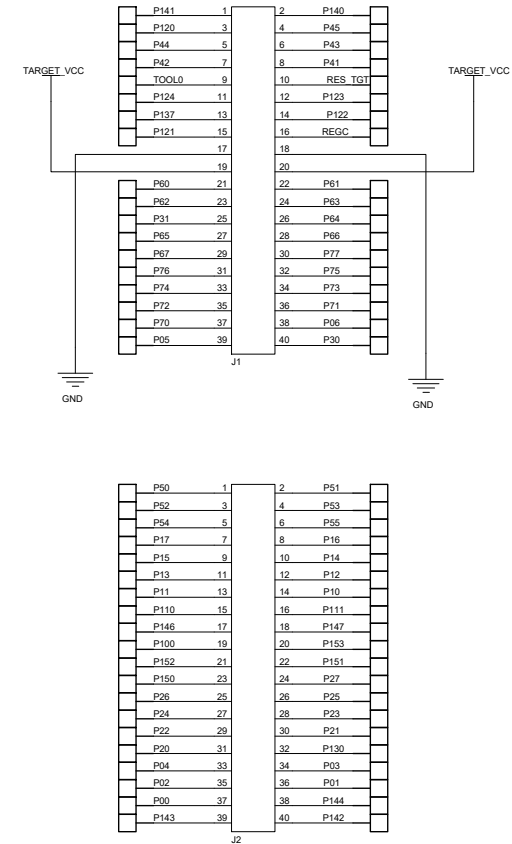
J4
2-3:VCC=5V(VBUS)
2-1:VCC=3.3V
OPEN:VCC not Supply
(Cut SS11 when you mount J4)

SS
X-SS: Short-pad Short-type(Default:Short)
SC
X-SC: Short-pad Cut-type(Default:Open)

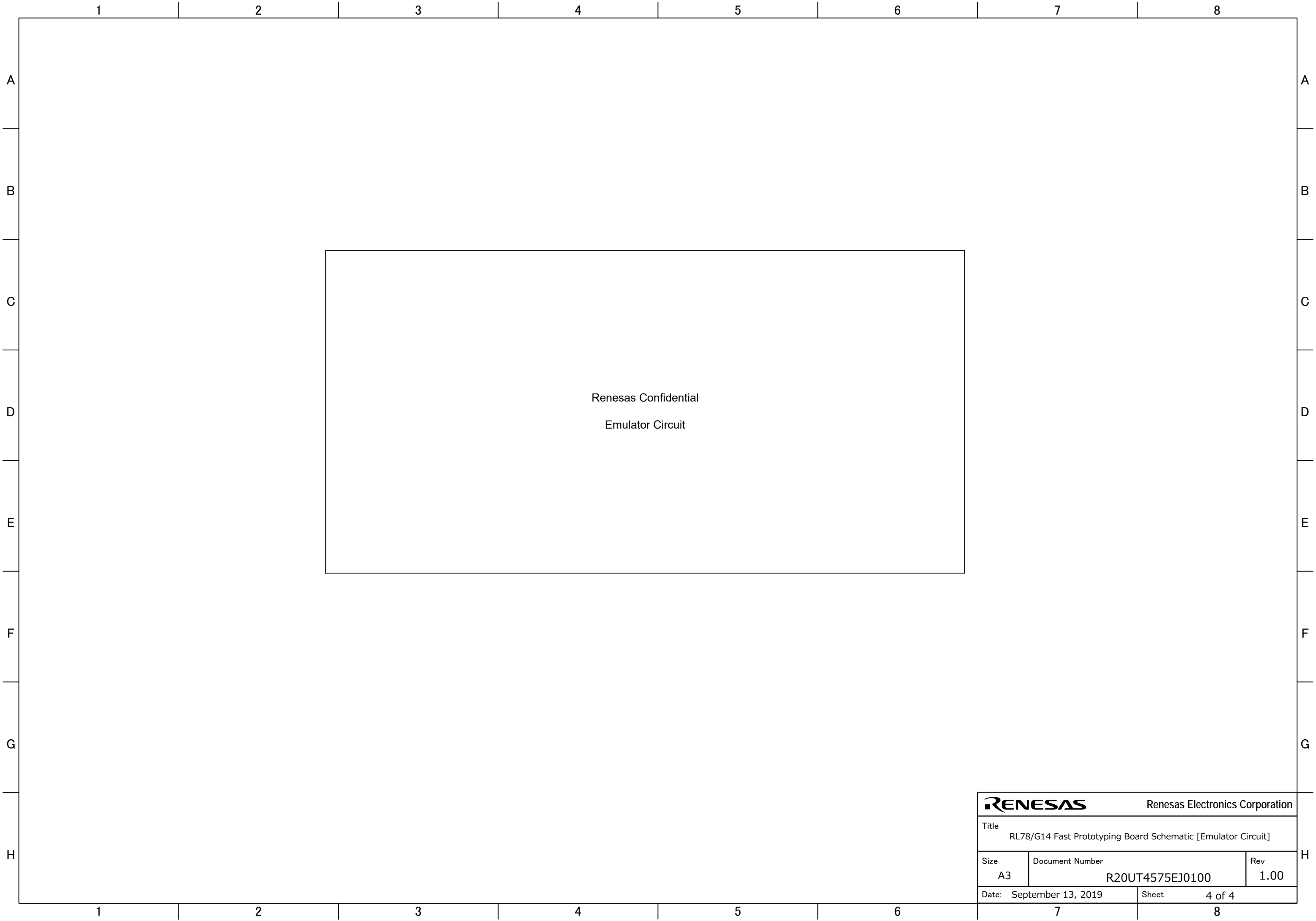
Arduino



MCU HEADER



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Date: September 13, 2019		Sheet	3 of 4



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Emulator Circuit

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Title RL78/G14 Fast Prototyping Board Schematic [Emulator Circuit]			
Size A3	Document Number R20UT4575EJ0100		Rev 1.00
Date: September 13, 2019		Sheet	4 of 4