Product Name: RX66T CPU Card

Board Name: RX66T CPU Card (RTK0EMX870C00000BJ)

Schematic No: R12TU0049EJ0100

Date: 2018/4/19

No.	Reference	Description	Manufacturer	PartNumber	Qty
1	CNA,B	CONN HEADR FMALE 20POS .1 DL AU"	Sullins Connector Solutions	SFH11-PBPC-D10-ST-BK	2
2	CN6	CONN HEADER XH TOP 4POS 2.5MM	JST	B4B-XH-A(LF)(SN)	1
3	CN3,5	CONN HEADER XH TOP 5POS 2.5MM	JST	B5B-XH-A(LF)(SN)	2
4	CN7	CONN PLUG 14POS 3A 300V STRT DIP	Omron Electronics Inc-EMC Div	XG4C-1431	1
5	JP1,JP2	CONN HEADER 2.54MM 2P	MAC8	WL-8-2P	2
6	(JP2)	JUMPER SOCKET	MAC8	JS-1	1
7	C10,12	LAMINATED CERAMIC CAPACITOR(C1608_50V_5%)	MURATA	GRM1882C1H220JA01D	2
8	C14,15,16,17,1 8,19,20,21,22,2 3,24,25,26,27,2 8,29,30,31,32,3 3,34,47,48,49	LAMINATED CERAMIC CAPACITOR(C1608_50V_5%)	MURATA	GRM1882C1H471JA01D	24
9	C35,36,37,38,3 9,40	LAMINATED CERAMIC CAPACITOR(C1608_50V_5%)	MURATA	GRM1882C1H102JA01D	6
10	C2,3,4,5,7,8,9, 41,42,43,44,45, 46	LAMINATED CERAMIC CAPACITOR(C1608_25V_10%)	MURATA	GRM188B11E104KA01D	13
11	C11	LAMINATED CERAMIC CAPACITOR(C1608_10V_10%)	MURATA	GRM188B11A105KA61D	1
12	C13	LAMINATED CERAMIC CAPACITOR(C1608_10V_10%)	MURATA	GRM188B11A474KA61D	1
13	C1,6	LAMINATED CERAMIC CAPACITOR(C3216_25V_10%)	MURATA	GRM31CB31E106KA75L	2
14	D1	DIODE ARRAY 70V 215MA SC70	Rohm	DAN217U	1
15	LED1,2	LED 570NM GREEN WTR CLR 0805 SMD	Rohm	SML-H12M8TT86	2

No.	Reference	Description	Manufacturer	PartNumber	Qty
	R1,2,15,20,21,				
16	22,23,24,25,73,	CHIP RESISTOR(R1608_1/10W_5%)	KOA	RK73Z1JTTD	12
	74,75				
17	R3,4,5,70,71,7 2	CHIP RESISTOR(R1608_1/10W_1%)	KOA	RK73H1JTTD22R0F	6
18	R7	CHIP RESISTOR(R1608_1/10W_1%)	KOA	RK73H1JTTD4700F	1
	R10,11,12,13,1	CHIP RESISTOR(R1608_1/10W_1%)			
	4,16,17,18,19,2				
19	6,27,28,29,30,3		KOA	RK73H1JTTD6800F	24
	1,32,33,34,35,3				
	6,37,38,68,69				
	R43,44,45,49,5				
20	0,51,62,63,64,6	CHIP RESISTOR(R1608_1/10W_1%)	KOA	RK73H1JTTD1001F	12
	5,66,67				
0.1	R39,40,41,46,4	CHIP RESISTOR(R1608_1/10W_1%)	1/04	RK73H1JTTD2001F	6
21	7,48		KOA		
22	R8,9	CHIP RESISTOR(R1608_1/10W_1%)	KOA	RK73H1JTTD2701F	2
22	R53,54,55,56,5	CHIP RESISTOR(R1608_1/10W_1%)	KOA	RK73H1JTTD4701F	
23	7,58,59,60		KOA		8
24	R6,42,52,61	CHIP RESISTOR(R1608_1/10W_1%)	KOA	RK73H1JTTD1002F	4
25	SW1	SWITCH 6X3.5 240GF SMD	Panasonic - ECG	EVQ-5PN04K	1
26	U1	MCU 32BIT RX66T LQFP100	Renesas	R5F566TEADFP	1
27	Y1	CRYSTAL OSCILLATOR	Abracon	HC-49/US SMD 8.000MHZ 18PF	1

Unmounted

28	CNC,D	36POS 2.54MM	N/A	N/A	-
29	CN1	10POS 2.54MM	N/A	N/A	-
30	CN2,4	4POS 2.54MM	N/A	N/A	-

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No.	Reference	Description	Manufacturer	PartNumber	Qty
31	C50,51,52,53,5 4,55,56,57,58	LAMINATED CERAMIC CAPACITOR(C1608)	N/A	N/A	-
32	TP1,2,3,4,5,6, TPG1,2,3,4	TEST PIN	N/A	N/A	-

General Precautions in the Handling of Microprocessing Unit and Microcontroller Unit Products

The following usage notes are applicable to all Microprocessing unit and Microcontroller unit products from Renesas. For detailed usage notes on the products covered by this document, refer to the relevant sections of the document as well as any technical updates that have been issued for the products.

1. Handling of Unused Pins

Handle unused pins in accordance with the directions given under Handling of Unused Pins in the

The input pins of CMOS products are generally in the high-impedance state. In operation with an unused pin in the open-circuit state, extra electromagnetic noise is induced in the vicinity of LSI, an associated shoot-through current flows internally, and malfunctions occur due to the false recognition of the pin state as an input signal become possible. Unused pins should be handled as described under Handling of Unused Pins in the manual.

2. Processing at Power-on

The state of the product is undefined at the moment when power is supplied.

The states of internal circuits in the LSI are indeterminate and the states of register settings and pins are undefined at the moment when power is supplied.
In a finished product where the reset signal is applied to the external reset pin, the states of pins are not guaranteed from the moment when power is supplied until the reset process is completed.
In a similar way, the states of pins in a product that is reset by an on-chip power-on reset function are not guaranteed from the moment when power is supplied until the power reaches the level at which resetting has been specified.

3. Prohibition of Access to Reserved Addresses

Access to reserved addresses is prohibited.

The reserved addresses are provided for the possible future expansion of functions. Do not access
these addresses; the correct operation of LSI is not guaranteed if they are accessed.

4. Clock Signals

After applying a reset, only release the reset line after the operating clock signal has become stable. When switching the clock signal during program execution, wait until the target clock signal has stabilized.

When the clock signal is generated with an external resonator (or from an external oscillator) during a reset, ensure that the reset line is only released after full stabilization of the clock signal. Moreover, when switching to a clock signal produced with an external resonator (or by an external oscillator) while program execution is in progress, wait until the target clock signal is stable.

5. Differences between Products

Before changing from one product to another, i.e. to a product with a different part number, confirm that the change will not lead to problems.

The characteristics of Microprocessing unit or Microcontroller unit products in the same group but having a different part number may differ in terms of the internal memory capacity, layout pattern, and other factors, which can affect the ranges of electrical characteristics, such as characteristic values, operating margins, immunity to noise, and amount of radiated noise. When changing to a product with a different part number, implement a system-evaluation test for the given product.

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