Pin Map

Production
SAMiCALNA Fabric
Type
Arithmethic Logic Unit
Family
C4B3R4W1T
Package
TQFP/MLF
Version
1.0

Legend

- VCC
- GROUND
- INPUT
- OUTPUT

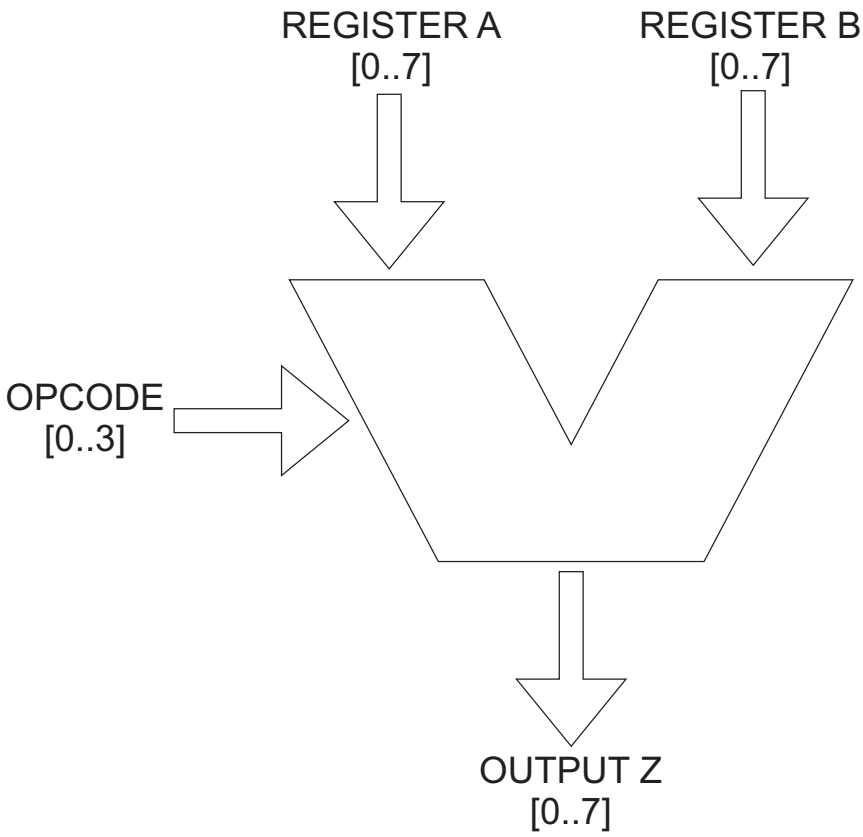
Foot Configuration

No.	Pin	Signal Type	Data Type
7-14	PA 0 - 7	Digital	Input A
27-34	PB 0 - 7	Digital	Input B
17	PC 0	Digital	Enable
18	PC 1	Digital	Clock
19	PC 2	Digital	Reset
20	PC 3	Digital	Reff
21-24	PC 4-7	Digital	OPCODE
37-40 and 1-4	PD 0 - 7	Digital	Output

Power Information

Foot	Pin	Data Size	Voltage	I	Freq
7	PA0	1 bit	3.3 Volt	.5 A	1 MHz
8	PA1	1 bit	3.3 Volt	.5 A	1 MHz
9	PA2	1 bit	3.3 Volt	.5 A	1 MHz
10	PA3	1 bit	3.3 Volt	.5 A	1 MHz
11	PA4	1 bit	3.3 Volt	.5 A	1 MHz
12	PA5	1 bit	3.3 Volt	.5 A	1 MHz
13	PA6	1 bit	3.3 Volt	.5 A	1 MHz
14	PA7	1 bit	3.3 Volt	.5 A	1 MHz
27	PB0	1 bit	3.3 Volt	.5 A	1 MHz
28	PB1	1 bit	3.3 Volt	.5 A	1 MHz
29	PB2	1 bit	3.3 Volt	.5 A	1 MHz
30	PB3	1 bit	3.3 Volt	.5 A	1 MHz
31	PB4	1 bit	3.3 Volt	.5 A	1 MHz
32	PB5	1 bit	3.3 Volt	.5 A	1 MHz
33	PB6	1 bit	3.3 Volt	.5 A	1 MHz
34	PB7	1 bit	3.3 Volt	.5 A	1 MHz
17	PC0	1 bit	3.3 Volt	.5 A	1 MHz
18	PC1	1 bit	3.3 Volt	.5 A	1 MHz
19	PC2	1 bit	3.3 Volt	.5 A	1 MHz
20	PC3	1 bit	3.3 Volt	.5 A	1 MHz
21	PC4	1 bit	3.3 Volt	.5 A	1 MHz
22	PC5	1 bit	3.3 Volt	.5 A	1 MHz
23	PC6	1 bit	3.3 Volt	.5 A	1 MHz
24	PC7	1 bit	3.3 Volt	.5 A	1 MHz
37	PD0	1 bit	3.3 Volt	.5 A	1 MHz
38	PD1	1 bit	3.3 Volt	.5 A	1 MHz
39	PD2	1 bit	3.3 Volt	.5 A	1 MHz
40	PD3	1 bit	3.3 Volt	.5 A	1 MHz
1	PD4	1 bit	3.3 Volt	.5 A	1 MHz
2	PD5	1 bit	3.3 Volt	.5 A	1 MHz
3	PD6	1 bit	3.3 Volt	.5 A	1 MHz
4	PD7	1 bit	3.3 Volt	.5 A	1 MHz

ALU Block Diagram



ALU Function

opcode	Operation Z	opcode	Operation Z	opcode	Operation Z
01	RGZ = 0	11	RGB + RGZ	21	RGB - RGA
02	RGA + RGB	12	RGB - RGZ	22	RGB ^ RGA
03	RGA - RGB	13	RGB ^ RGZ	23	RGB & RGA
04	RGA ^ RGB	14	RGB & RGZ	24	RGB | RGA
05	RGA & RGB	15	RGB | RGZ	25	RGB && RGA
06	RGA | RGB	16	RGB && RGZ	26	RGB || RGA
07	RGA && RGB	17	RGB || RGZ	27	RGB + 1
08	RGA || RGB	18	RGZ + 1	28	RGB - 1
09	RGA + 1	19	RGZ - 1	29	RGB << 1
0A	RGA - 1	1A	RGZ << 1	2A	RGB >> 1
0B	RGA << 1	1B	RGZ >> 1	2B	! RGB
0C	RGA >> 1	1C	! RGZ	2C	~ RGB
0D	! RGA	1D	~ RGZ	2D	RGB + RGB
0E	~ RGA	1E	RGZ + RGZ	2E	RGB - RGB
0F	RGA + RGA	1F	RGZ - RGZ	2F	RGA + RGZ
10	RGA - RGA	20	RGB + RGA	30	RGA - RGZ