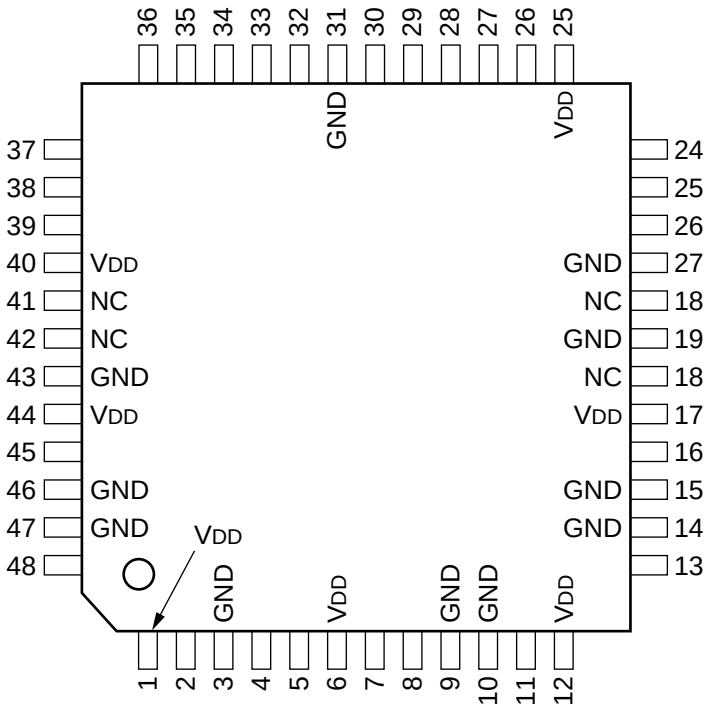
C-MOS 1-BIT AD/DA CONVERTER

—TOP VIEW—



PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	—	V_{DD}	13	O	AOUT2 (–)	25	—	V_{DD}	37	I	DASL0
2	O	AOUT1 (+)	14	—	GND	26	I	MS	38	I	DASL1
3	—	GND	15	—	GND	27	I/O	LRCK	39	I	WO
4	O	UCLK	16	I	AIN2	28	I/O	BCK	40	—	V_{DD}
5	O	XCLK	17	—	V_{DD}	29	I	SIN	41	—	NC
6	—	V_{DD}	18	—	NC	30	O	SOUT	42	—	NC
7	I	XTLI	19	—	GND	31	—	GND	43	—	GND
8	O	XTLO	20	—	NC	32	I	MASL	44	—	V_{DD}
9	—	GND	21	—	GND	33	I	MLSL	45	I	AIN1
10	—	GND	22	O	XMCK2	34	I	XSL0	46	—	GND
11	O	AOUT2 (+)	23	I	TEST	35	I	XSL1	47	—	GND
12	—	V_{DD}	24	I	CLR	36	I	XSL2	48	O	AOUT1 (–)

INPUT

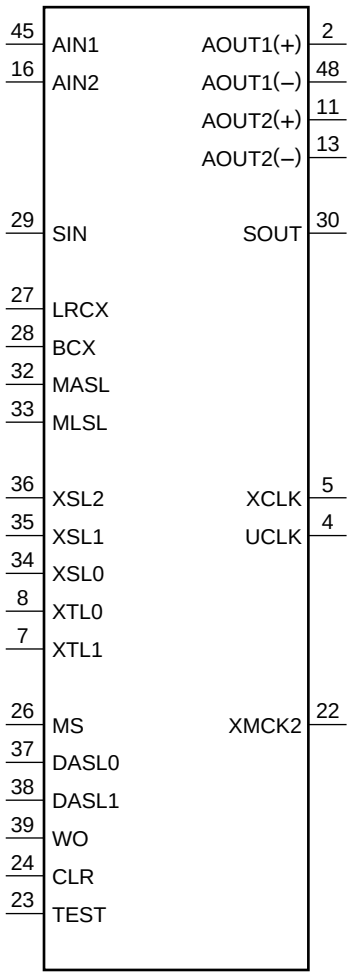
AIN1, AIN2	;	CH1/CH2 AD CONVERTER ANALOG INPUTS
CLR	;	SYSTEM CLEAR (H : NORMAL/L : CLEAR)
DASL0	;	IC TEST PIN (H : NORMAL)
DASL1	;	IC TEST PIN (L : NORMAL)
MASL	;	FOR SERIAL I/O WITH 16-BIT SERIAL DATA, SELECTS EITHER THE FIRST 16-BIT SLOT OR THE LAST 16-BIT SLOT OF THE 32-BIT SLOT. (H : FORWARD PACKING, L : REARWARD PACKING)
MLSL	;	LSB FIRST/MSB FIRST SELECT (H : MSB FIRST/L : LSB FIRST)
MS	;	MASTER/SLEAVE MODE SELECT (H : MASTER MODE/L : SLEAVE MODE)
SIN	;	SERIAL DATA INPUT (1 SAMPLING 2 CHANNEL)
TEST	;	TEST PIN
WO	;	WINDOW OPEN FOR SYNCRONOUS (H : WINDOW MASK/L : WINDOW OPEN)
XSL0, XSL1, XSL2	;	CRYSTAL SELECT
XTL1	;	CRYSTAL OSCILLATOR INPUT

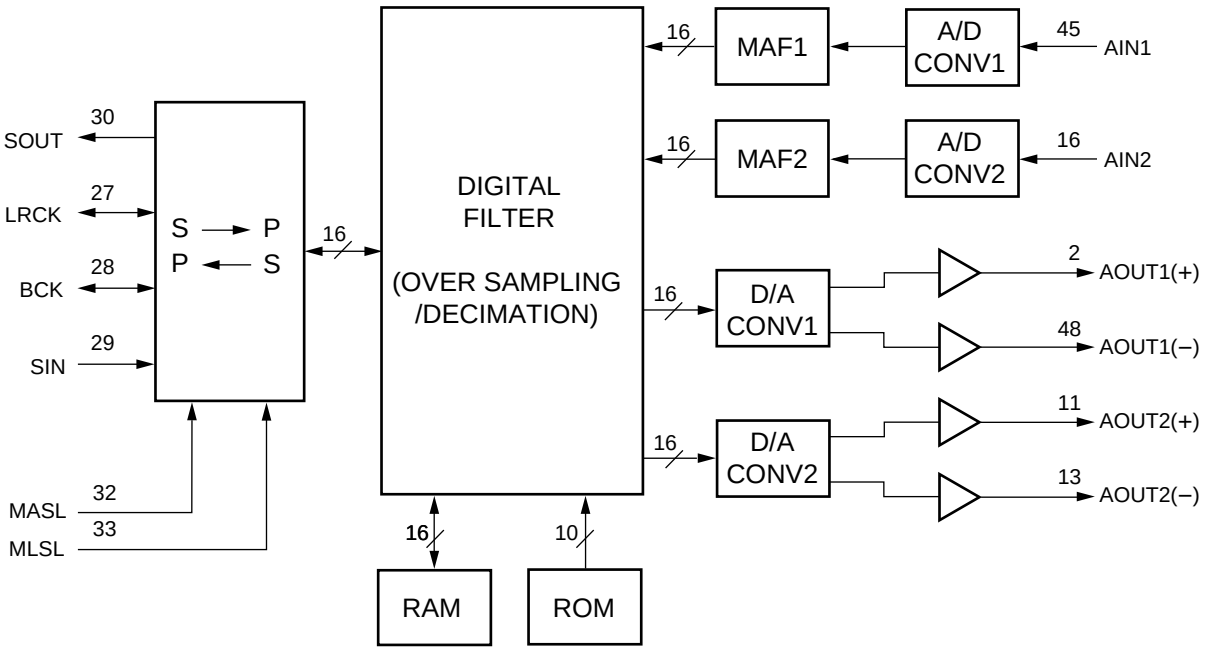
OUTPUT

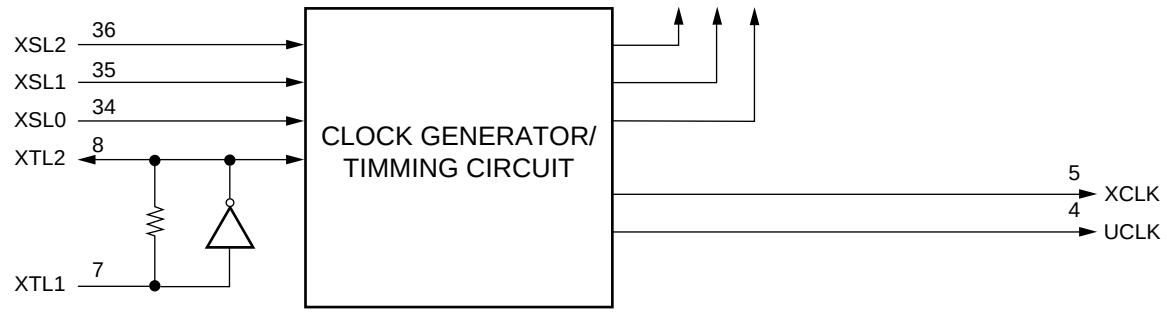
AOUT1(+), AOUT2(+)	;	CH1/CH2 DA CONVERTER ANALOG (+) OUTPUTS
AOUT1(–), AOUT2(–)	;	CH1/CH2 DA CONVERTER ANALOG (–) OUTPUTS
SOUT	;	SERIAL OUTPUT (1 SAMPLING 2 CHANNEL)
UCLK	;	USER CLOCK
XCLK	;	256Fs CLOCK
XMCK2	;	IC TEST PIN (L : NORMAL)
XTL0	;	CRYSTAL OSCILLATOR OUTPUT

INPUT/OUTPUT

BCK	;	SERIAL BIT TRANSFER CLOCK FOR SERIAL I/O
LRCK	;	SAMPLING FREQUENCY CLOCK FOR SERIAL I/O




SOUT
30
LRCK
27
BCK
28
SIN
29
S → P
P ← S
16
DIGITAL
FILTER
(OVER SAMPLING
/DECIMATION)
MASL
32
MLSL
33
16
10
RAM
ROM
16
MAF1
A/D
CONV1
45
AIN1
16
MAF2
A/D
CONV2
16
AIN2
16
D/A
CONV1
2
AOUT1(+)
48
AOUT1(−)
16
D/A
CONV2
11
AOUT2(+)
13
AOUT2(−)


XSL2
36
XSL1
35
XSL0
34
XTL2
8
XTL1
7
CLOCK GENERATOR/
TIMMING CIRCUIT
5
XCLK
4
UCLK