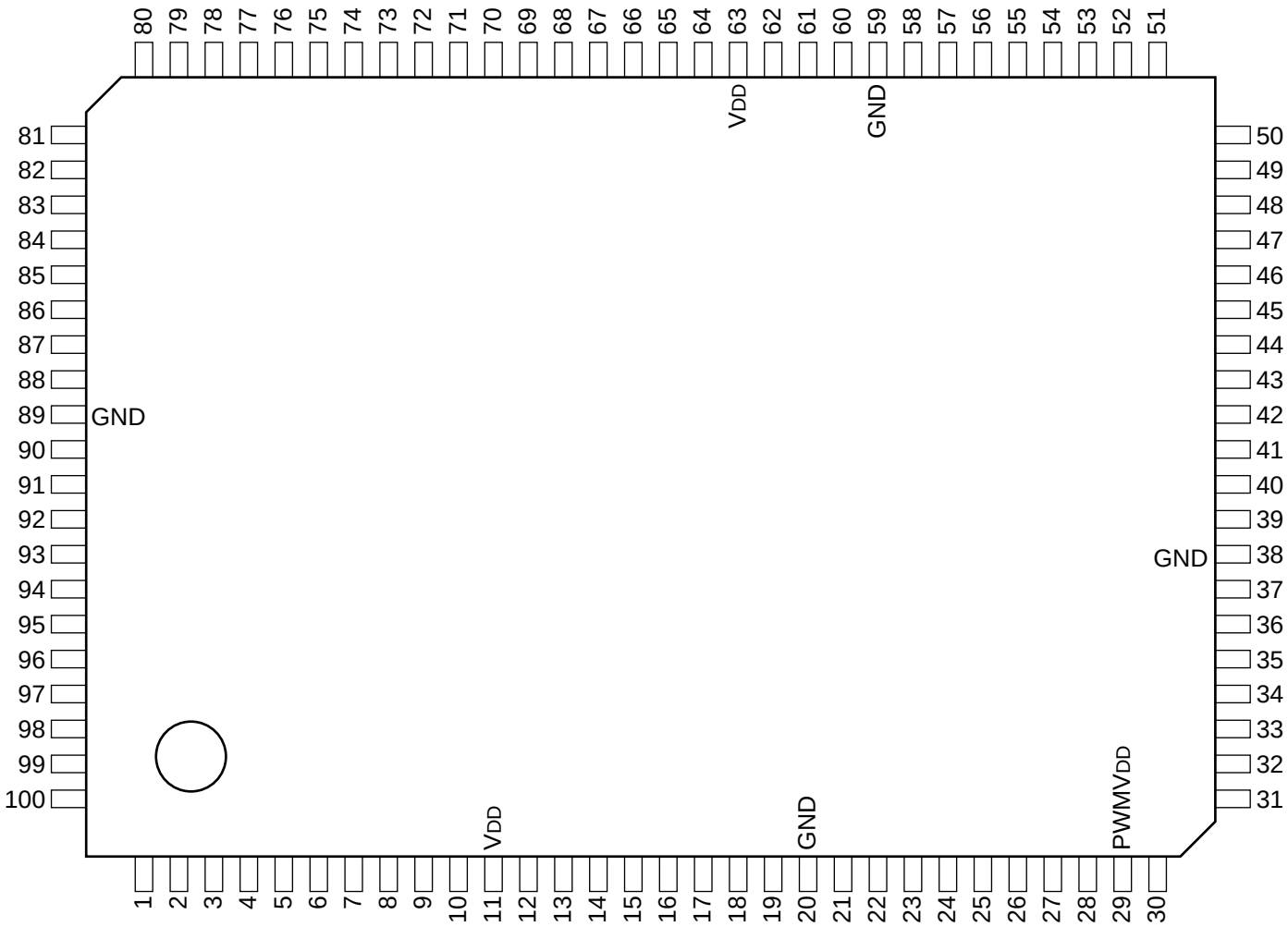
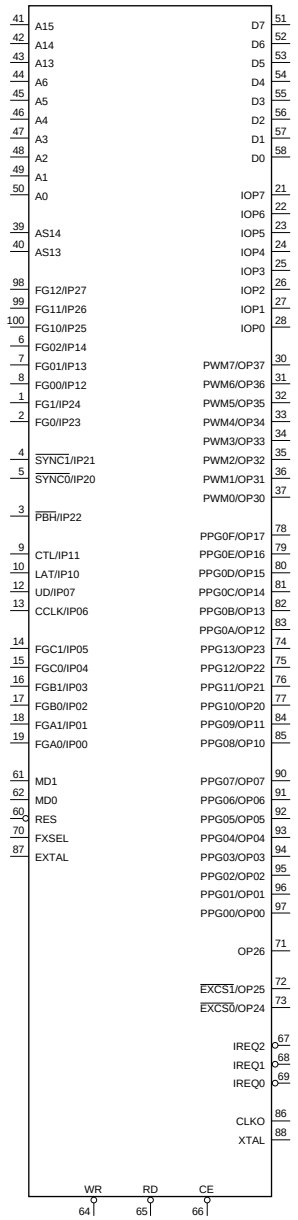
SERVO IC

—TOP VIEW—



PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	I	FG1/IP24	26	I/O	IOP2	51	I/O	D7	76	O	PPG11/OP21
2	I	FG0/IP23	27	I/O	IOP1	52	I/O	D6	77	O	PPG10/OP20
3	I	$\overline{\text{PBH}}$/IP22	28	I/O	IOP0	53	I/O	D5	78	O	PPG0F/OP17
4	I	$\overline{\text{SYNC1}}$/IP21	29	—	PWM V_{DD}	54	I/O	D4	79	O	PPG0E/OP16
5	I	$\overline{\text{SYNC0}}$/IP20	30	O	PWM7/OP37	55	I/O	D3	80	O	PPG0D/OP15
6	I	FG02/IP14	31	O	PWM6/OP36	56	I/O	D2	81	O	PPG0C/OP14
7	I	FG01/IP13	32	O	PWM5/OP35	57	I/O	D1	82	O	PPG0B/OP13
8	I	FG00/IP12	33	O	PWM4/OP34	58	I/O	D0	83	O	PPG0A/OP12
9	I	CTL/IP11	34	O	PWM3/OP33	59	—	GND	84	O	PPG09/OP11
10	I	LAT/IP10	35	O	PWM2/OP32	60	I	$\overline{\text{RES}}$	85	O	PPG08/OP10
11	—	V_{DD}	36	O	PWM1/OP31	61	I	MD1	86	O	CLKO
12	I	UD/IP07	37	O	PWM0/OP30	62	I	MD0	87	I	EXTAL
13	I	CCLK/IP06	38	—	GND	63	—	V_{DD}	88	O	XTAL
14	I	FGC1/IP05	39	I	AS14	64	I	$\overline{\text{WR}}$	89	—	GND
15	I	FGC0/IP04	40	I	AS13	65	I	$\overline{\text{RD}}$	90	O	PPG07/OP07
16	I	FGB1/IP03	41	I	A15	66	I	$\overline{\text{CE}}$	91	O	PPG06/OP06
17	I	FGB0/IP02	42	I	A14	67	O	$\overline{\text{IREQ2}}$	92	O	PPG05/OP05
18	I	FGA1/IP01	43	I	A13	68	O	$\overline{\text{IREQ1}}$	93	O	PPG04/OP04
19	I	FGA0/IP00	44	I	A6	69	O	$\overline{\text{IREQ0}}$	94	O	PPG03/OP03
20	—	GND	45	I	A5	70	I	FXSEL	95	O	PPG02/OP02
21	I/O	IOP7	46	I	A4	71	O	OP26	96	O	PPG01/OP01
22	I/O	IOP6	47	I	A3	72	O	$\overline{\text{EXCS1}}$/OP25	97	O	PPG00/OP00
23	I/O	IOP5	48	I	A2	73	O	$\overline{\text{EXCS0}}$/OP24	98	I	FG12/IP27
24	I/O	IOP4	49	I	A1	74	O	PPG13/OP23	99	I	FG11/IP26
25	I/O	IOP3	50	I	A0	75	O	PPG12/OP22	100	I	FG10/IP25



INPUT

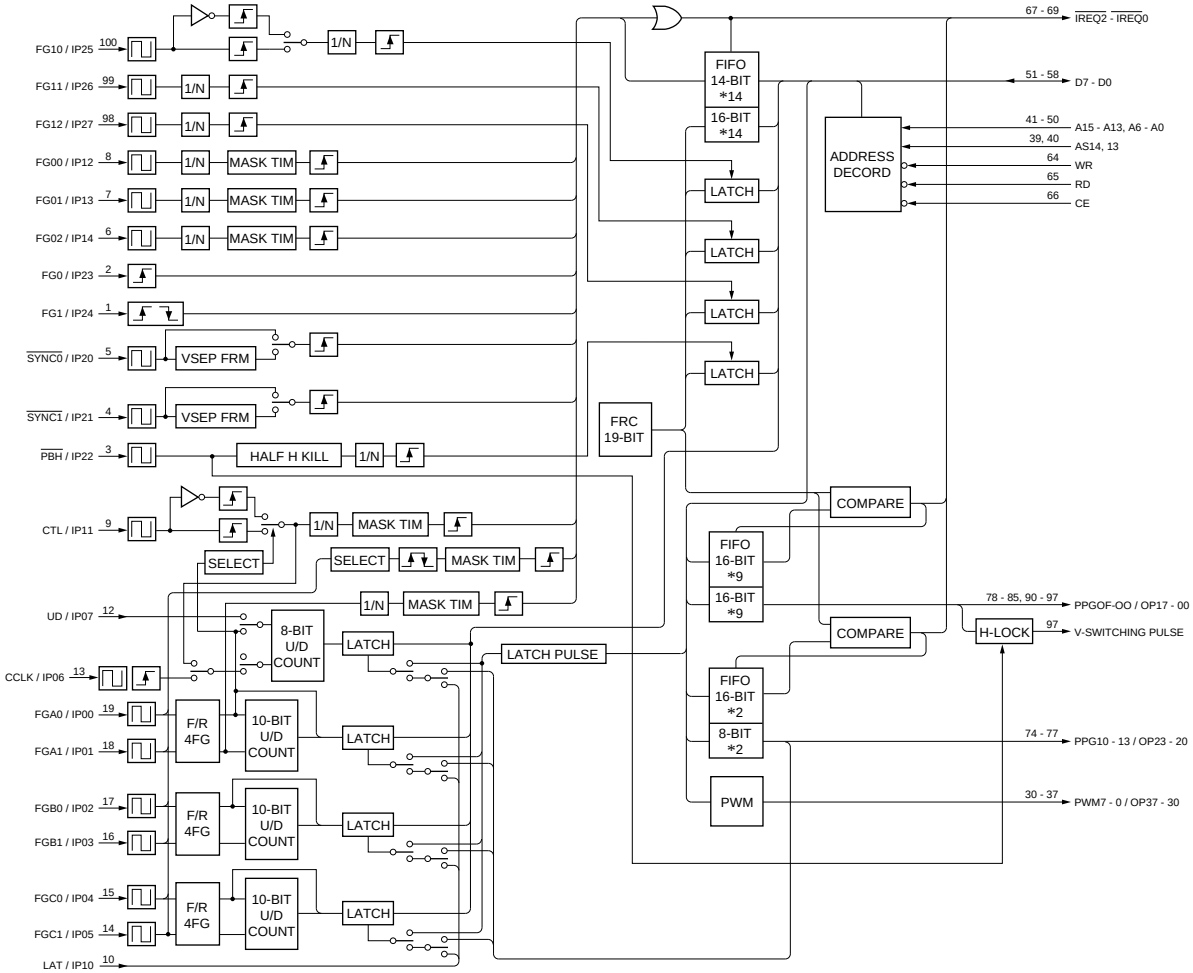
A0 - A15	;	ADDRSSS BUS
AS13, AS14	;	SELECTING CONDITION OF ADDRESS DECODER AS13 AND AS14 BITS
CCLK	;	8-BIT COUNTER CLOCK INPUT
CE	;	CHIP ENABLE
CTL	;	RESOLUTION 2.5MHz WITH EDGE SELECT FUNCTION. WITH FREQUENCY DIVISION MASK TIMER
EXTAL	;	CRYSTAL OSCILLATION OR EXTERNAL CLOCK INPUT
FG0	;	RESOLUTON 2.5MHz
FG00 - FG02	;	FREQUENCY DIVISION ENABLE RESOLUTION 2.5MHz. WITH FREQUENCY DIVISION MASK TIMER
FG1	;	RESOLUTION 2.5MHz BOTH EDGES
FG10	;	EDGE SELECTION ENABLE RESOLUTION 10MHz
FG11, FG12	;	FREQUENCY DIVISION ENABLE RESOLUTION 10MHz
FGA0	;	PERFORMS FORWARD/REVERSE ROTATION DETECTION AND 4FG COUNT (UP/DOWN) BY FGA0 AND FGA1. 10BITS. UP/DOWN IS MADE BY CONTROLLING THE UP/DOWN OF 8-BIT COUNTER.
FGA1	;	4FG PERFORMS FREQUENCY DIVISION AND FRC CAPTURE THROUGH MASK TIMER. ∗1 : SELECTS ONE OF FGA0 TO FGC1 INPUT AND DETECTS BOTH EDGES AND PERFORM THE FRC CAPTURE THROUGH THE MASK TIMER.
FGB0	;	PERFORMS FORWARD/REVERSE ROTATION DETECTION AND 4FG COUNT BY FGB0 AND FGB1.
FGB1	;	∗1 : SELECTS ONE OF FGA0 TO FGC1 INPUT AND DETECTS BOTH EDGES AND PERFORM THE FRC CAPTURE THROUGH THE MASK TIMER.
FGC0	;	PERFORMS FORWARD/REVERSE ROTATION DETECTION AND 4FG COUNT BY FGC0 AND FGC1.
FGC1	;	∗1 : SELECTS ONE OF FGA0 TO FGC1 INPUT AND DETECTS BOTH EDGES AND PERFORM THE FRC CAPTURE THROUGH THE MASK TIMER.
FXSEL	;	FREQUENCY DIVISION SELECTION CLOCK INPUT
LAT	;	EXTERNAL LATCH TIMING OF UP/DOWN COUNTER
MD0, 1	;	TEST MODE DESIGNATION
PBH	;	INPUT OF COMPOSITE SYNC OR H SYNC. RESOLUTION 10MHz. WITH HALF H KILLER.
RD	;	REDE
RES	;	RESET
SYNC0, 1	;	INPUT OF COMPOSITE SYNC OR V SYNC. RESOLUTION 2.5MHz
UD	;	8-BIT COUNTER UP/ DOWN INPUT
WR	;	WRITE

OUTPUT

CLKO	;	CLOCK OUTPUT
EXCS0, 1	;	DECODE AT ADDRESS A3 LEVEL
IREQ0	;	INTERRUPTION SIGNAL OF FRC CAPTURE UNIT
IREQ1	;	COINCIDENCE INTERRUPTION OF PPG0
IREQ2	;	COINCIDENCE INTERRUPTION OF PPG1
OP26	;	EXCLUSIVELY OUTPUT PORT
PPG00 - PPG0F		
PPG10 - PPG13	;	PROGRAMMABLE PULSE GENERATOR RESOLUTION 1.25MHz PPG00 : WITH HLOCK
PWM0 - PWM5	;	PWM OUTPUT NORMALLY PWM, OR PWM0 AND PWM1, PWM2 AND PWM3, OR PWM4 AND PWM5 OUTPUT SIGNAL CORRESPONDED TO PUSH-PULL.
PWM6, 7	;	PWM OUTPUT
XTAL	;	CRYSTAL OSCILLATION

INPUT/OUTPUT

D0 - D7	;	DATA BUS
IOP0 - IOP7	;	SELECTS AND USES INPUT AND OUTPUT BY EVERY 1 BIT.


FG10 / IP25
100
FG11 / IP26
99
FG12 / IP27
98
FG00 / IP12
8
FG01 / IP13
7
FG02 / IP14
6
FG0 / IP23
2
FG1 / IP24
1
SYNC0 / IP20
5
SYNC1 / IP21
4
PBH / IP22
3
CTL / IP11
9
UD / IP07
12
CCLK / IP06
13
FGA0 / IP00
19
FGA1 / IP01
18
FGB0 / IP02
17
FGB1 / IP03
16
FGC0 / IP04
15
FGC1 / IP05
14
LAT / IP10
10
1/N
MASK TIM
VSEP FRM
HALF H KILL
SELECT
8-BIT U/D COUNT
10-BIT U/D COUNT
F/R 4FG
LATCH
LATCH PULSE
FRC 19-BIT
FIFO 14-BIT *14
16-BIT *14
ADDRESS DECORD
COMPARE
FIFO 16-BIT *9
16-BIT *9
FIFO 16-BIT *2
8-BIT *2
PWM
H-LOCK
67 - 69
IREQ2 - IREQ0
51 - 58
D7 - D0
41 - 50
A15 - A13, A6 - A0
39, 40
AS14, 13
64
WR
65
RD
66
CE
78 - 85, 90 - 97
PPGOF-OO / OP17 - 00
97
V-SWITCHING PULSE
74 - 77
PPG10 - 13 / OP23 - 20
30 - 37
PWM7 - 0 / OP37 - 30