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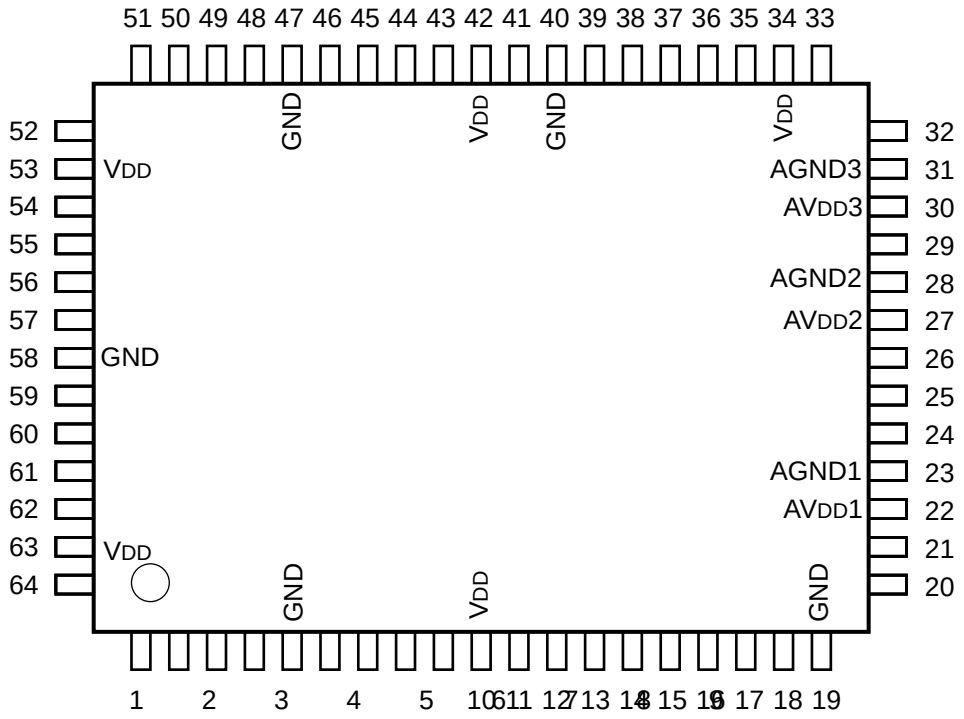
DIGITAL VIDEO ENCODER

-TOP VIEW-



(AVDD1 to 3 = +3.3 to 5V, VDD = +3.3 to 5V)

PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	I	PD7	17	I/O	PD9/TD1	33	I/O	TD10	49	I	SCK/SCL
2	I	PD6	18	I/O	PD8/TD0	34	-	VDD	50	I	XCS/SA
3	I	PD5	19	-	GND	35	I/O	TD9	51	I	XVRST
4	I	PD4	20	I	IREF	36	I/O	TD8	52	I	FI
5	-	GND	21	I	VREF	37	I	XTEST1	53	-	VDD
6	I	PD3	22	-	AVDD1	38	I	XTEST2	54	I	XTEST4
7	I	PD2	23	-	AGND1	39	I	XTEST3	55	I	XRST
8	I	PD1	24	O	COMP-O/V	40	-	GND	56	I	SYSCLK
9	I	PD0	25	O	VB	41	I	TRST	57	O	PDCLK
10	-	VDD	26	O	VG	42	-	VDD	58	-	GND
11	I/O	PD15/TD7	27	-	AVDD2	43	I	TDI	59	O	VSYNC
12	I/O	PD14/TD6	28	-	AGND2	44	I	TMS	60	O	HSYNC
13	I/O	PD13/TD5	29	O	Y-OUT/Y	45	I	TCK	61	O	SO
14	I/O	PD12/TD4	30	-	AVDD3	46	O	TDO	62	O	FID
15	I/O	PD11/TD3	31	-	AGND3	47	-	GND	63	-	VDD
16	I/O	PD10/TD2	32	O	C-OUT/U	48	I	SI/SDA	64	I	XIICEN

INPUT

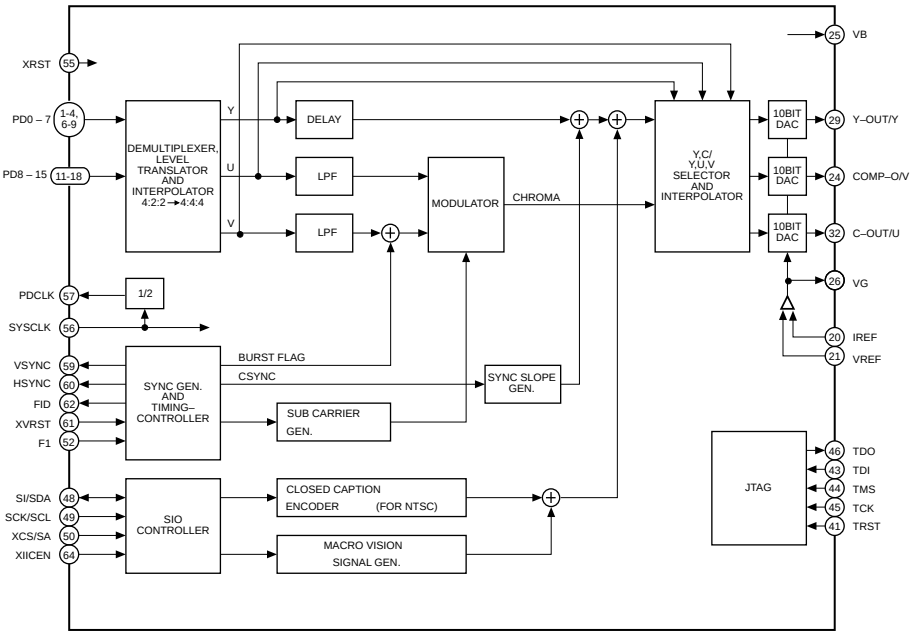
FI	; FIELD ID INPUT
IREF	; REFERENCE CURRENT INPUT
PD0-15	; PIXEL DATA INPUTS
SI/SDA	; SERIAL DATA INPUT
SCK/SCL	; SERIAL CLOCK INPUT
SYSCLK	; SYSTEM CLOCK INPUT
TCK	; CLOCK INPUT FOR JTAG
TDI	; SERIAL DATA INPUT FOR JTAG
TMS	; CONTROL SIGNAL INPUT FOR JTAG
TRST	; RESET SIGNAL INPUT FOR JTAG
VREF	; REFERENCE VOLTAGE INPUT
XCS/SA	; CHIP SELECT INPUT
XIICEN	; SERIAL INTERFACE MODE SELECT INPUT
XRST	; SYSTEM RESET INPUT
XTEST1-4	; TEST MODE CONTROL INPUTS
XVRST	; V-SYNC RESET INPUT

OUTPUT

COMP-O/V	; COMPOSITE/V D/A CONVERTER OUTPUT
C-OUT/U	; CHROMA/U D/A CONVERTER OUTPUT
FID	; FIELD ID OUTPUT
HSYNC	; H SYNC OUTPUT
PDCLK	; PIXEL DATA CLOCK OUTPUT FOR 13.5MHz
SO	; SERIAL OUTPUT
TDO	; SERIAL DATA OUTPUT FOR JTAG
VB,VG	; EXTERNAL CAPACITOR TERMINAL
VSYNC	; V SYNC OUTPUT
Y-OUT/Y	; Y D/A CONVERTER OUTPUT

INPUT/OUTPUT

TD0-10	; TEST DATA BUS


XRST
55
PD0 – 7
1-4, 6-9
PD8 – 15
11-18
DEMULTIPLEXER, LEVEL TRANSLATOR AND INTERPOLATOR 4:2:2→4:4:4
Y
U
V
DELAY
LPF
LPF
MODULATOR
CHROMA
Y,C/ Y,U,V SELECTOR AND INTERPOLATOR
10BIT DAC
10BIT DAC
10BIT DAC
25
VB
29
Y–OUT/Y
24
COMP–O/V
32
C–OUT/U
26
VG
20
IREF
21
VREF
PDCLK
57
1/2
SYSCLK
56
VSYNC
59
HSYNC
60
FID
62
XVRST
61
F1
52
SYNC GEN. AND TIMING– CONTROLLER
BURST FLAG
CSYNC
SUB CARRIER GEN.
SYNC SLOPE GEN.
SI/SDA
48
SCK/SCL
49
XCS/SA
50
XIICEN
64
SIO CONTROLLER
CLOSED CAPTION ENCODER (FOR NTSC)
MACRO VISION SIGNAL GEN.
JTAG
46
TDO
43
TDI
44
TMS
45
TCK
41
TRST