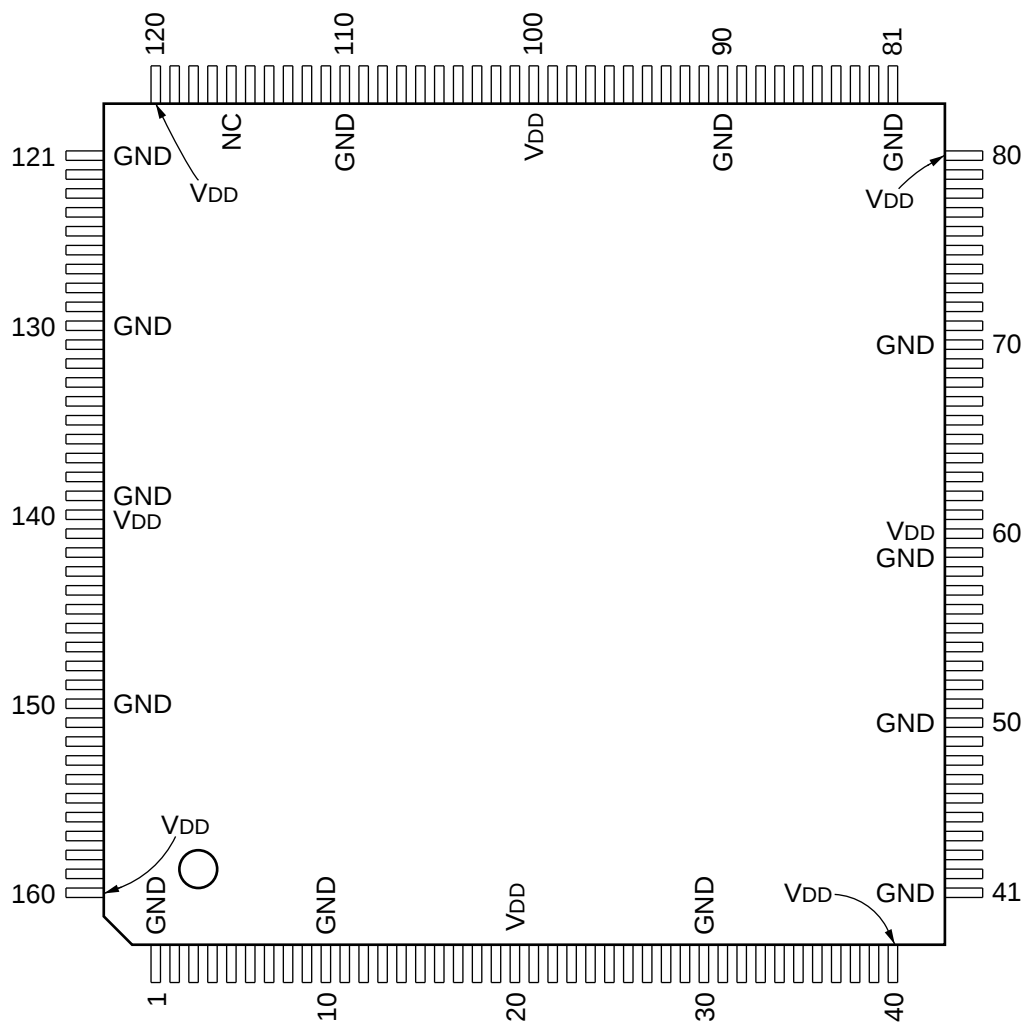
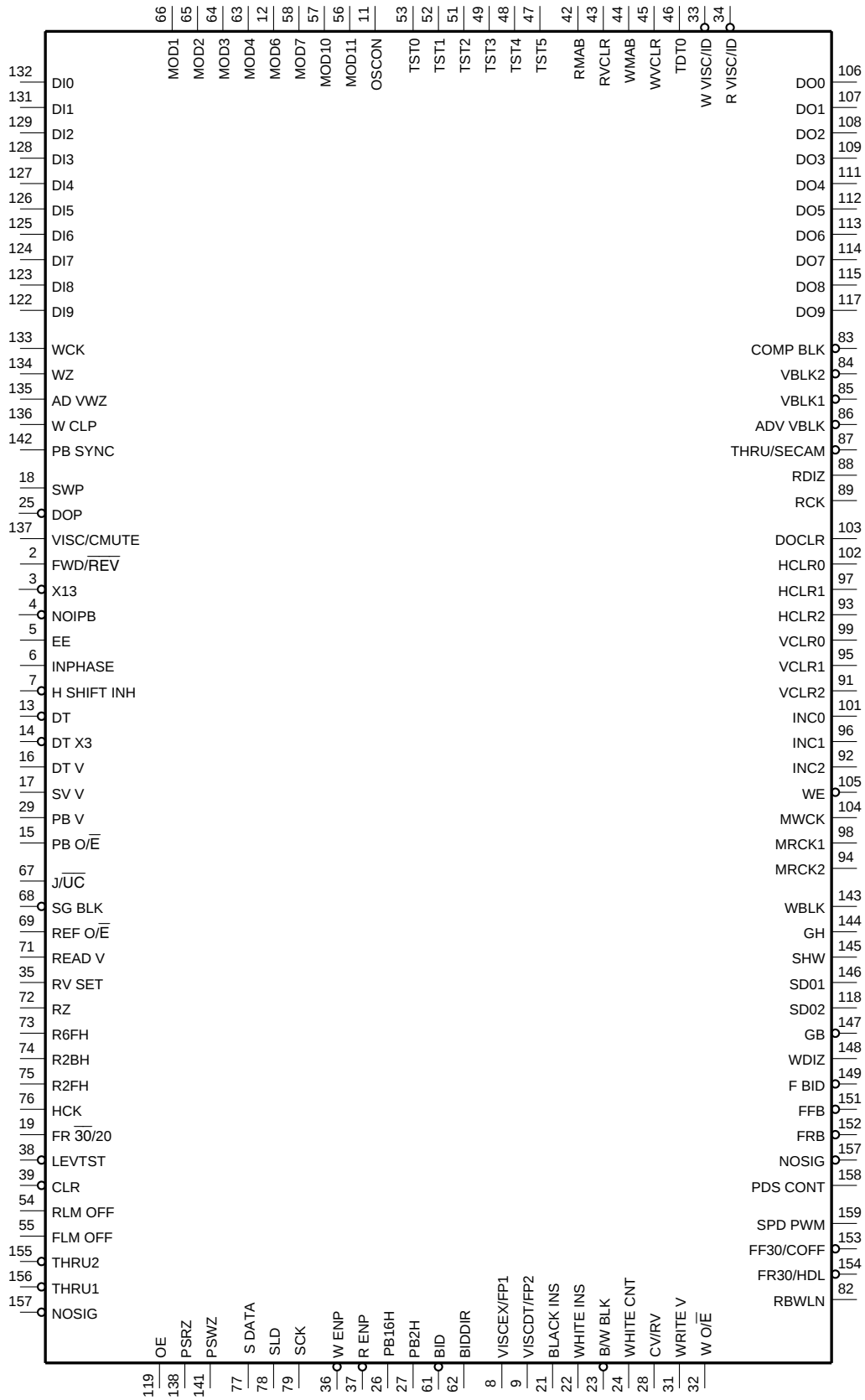


C-MOS VIDEO DATA PROCESS/SYNC GUARD/MEMORY CONTROLLER

—TOP VIEW—



PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	—	GND	41	—	GND	81	—	GND	121	—	GND
2	I	FWD/REV	42	I/O	RMAB	82	O	RBWLN	122	I	DI9
3	I	X13	43	I/O	RVCLR	83	O	COMP BLK	123	I	DI8
4	I	NOIPB	44	I/O	WMAB	84	O	VBLK2	124	I	DI7
5	I	EE	45	I/O	WVCLR	85	O	VBLK1	125	I	DI6
6	I	INPHASE	46	I/O	TDT0	86	O	ADV VBLK	126	I	DI5
7	I	H SHIFT INH	47	I	TST5	87	O	THRU/SECAM	127	I	DI4
8	O	VISCEX/FP1	48	I	TST4	88	O	RDIZ	128	I	DI3
9	O	VISCDT/FP2	49	I	TST3	89	O	RCK	129	I	DI2
10	—	GND	50	—	GND	90	—	GND	130	—	GND
11	I	OSCON	51	I	TST2	91	O	VCLR2	131	I	DI1
12	I	MOD6	52	I	TST1	92	O	INC2	132	I	DI0
13	I	DT	53	I	TST0	93	O	HCLR2	133	I	WCK
14	I	DT X3	54	I	RLM OFF	94	O	MRCK2	134	I	WZ
15	I	PB O/E	55	I	FLM OFF	95	O	VCLR1	135	I	ADV WZ
16	I	DT V	56	I	MOD11	96	O	INC1	136	I	W CLP
17	I	SV V	57	I	MOD10	97	O	HCLR1	137	I	VISC/CMUTE
18	I	SWP	58	I	MOD7	98	O	MRCK1	138	I/O	PSRZ
19	I	FR30/20	59	—	GND	99	O	VCLR0	139	—	GND
20	—	VDD	60	—	VDD	100	—	VDD	140	—	VDD
21	O	BLACK INS	61	I/O	BID	101	O	INC0	141	I/O	PSWZ
22	O	WHITE INS	62	I/O	BIDDIR	102	O	HCLR0	142	I	PB SYNC
23	O	B/W BLK	63	I	MOD4	103	O	DOCLR	143	O	WBLK
24	O	WHITE CNT	64	O	WVRST	104	O	MWCK	144	I/O	GH
25	I	DOP	65	I	MOD2	105	O	WE	145	O	SHW
26	I/O	PB16H	66	I	MOD1	106	O	DO0	146	I/O	SDO1
27	I/O	PB2H	67	I	J/ UC	107	O	DO1	147	I/O	GB
28	O	CV/RV	68	I	SG BLK	108	O	DO2	148	I/O	WDIZ
29	I/O	PB V	69	I	REF O/E	109	O	DO3	149	I/O	F BID
30	—	GND	70	—	GND	110	—	GND	150	—	GND
31	O	WRITE V	71	I	READ V	111	O	DO4	151	I/O	FFB
32	O	W O/E	72	I	RZ	112	O	DO5	152	I/O	FRB
33	I/O	W VISC/ID	73	I	R6FH	113	O	DO6	153	O	FF30/COFF
34	O	R VISC/ID	74	I	R2BH	114	O	DO7	154	O	FR30/HDL
35	I/O	RV SET	75	I	R2FH	115	O	DO8	155	I	THRU2
36	I/O	W ENP	76	I	HCK	116	—	NC	156	I	THRU1
37	I/O	R ENP	77	I	S DATA	117	O	DO9	157	I/O	NOSIG
38	I	LEVTST	78	I	SLD	118	I/O	SDO2	158	O	PDS CONT
39	I	CLR	79	I	SCK	119	I	OE	159	O	SPD PWM
40	—	VDD	80	—	VDD	120	—	VDD	160	—	VDD



INPUT

ADV WZ	; 66-CLOCK IN ADVANCE OF WRITE ZERO
CLR	; L : CLEAR
DI0 - DI9	; INPUT VIDEO DATA 0 - 9
DOP	; L : DROP OUT PULSE
DT	; L : DYNAMIC TRACKING MODE V REFERENCE PULSE
DT V	; DYNAMIC TRACKING MODE V REFERENCE PULSE
DT X3	; L : DYNAMIC TRACKING 3 TIMES NORMAL SPEED
EE	; H : VIDEO EE
FLM OFF	; H : FORWARD LIMITER OFF
FR $\overline{30/20}$	; MORE THAN 20/30 TIMES NORMAL SPEED SELECT
FWD/REV	; H : FORWARD, L : REVERSE
H SHIFT INH	; H SHIFT INHIBIT
HCK	; READ CLOCK (13.5 OR 14.3 MHz)
INPHASE	; L : COLOR FRAMING DISCORD H : COLOR FRAMING IN PHASE
J/UC	; H : JAPAN, L : USA/CANADA
LEVTST	; L : VIDEO LEVEL TEST
MOD1	; H : 525, L : 625
MOD2	; H : NTSC/SECAM, L : PAL/PAL-M
MOD4	; H : READ EXPANDER, L : WRITE EXPANDER
MOD6	; L : EXTERNAL PB OUTPUT ENABLE SELECT
MOD7	; H : Y, L : CHROMA
MOD10	; L : Y/C SYNCHRONOUS MODE
MOD11	; H : READ DO PROCESS, L : WRITE DO PROCESS
NOIPB	; L : NORMAL PB, DT, EE
OE	; H : DATA OUTPUT ENABLE
OSCON	; H : REFERENCE OSCILLATER ON
PB O/ $\overline{E}$	; PB ODD/EVEN FIELD ID (H : ODD)
PB SYNC	; SYNC, SEPARATED FROM PB VIDEO
R2BH	; READ SYSTEM 2H BLANKING
R2FH	; READ SYSTEM 2FH CLOCK
R6FH	; READ SYSTEM 6FH CLOCK
READ V	; READ SYSTEM REFERENCE V
REF O/ $\overline{E}$	; READ SYSTEM ODD/EVEN FIELD ID (H : ODD)
RLM OFF	; H : REVERSE LIMITER OFF
RZ	; READ REFERENCE EDGE OF MEMORY
S DATA	; SERIAL DATA
SCK	; SERIAL CLOCK
SG BLK	; L : COMPOSITE BLANKING PULSE
SLD	; SERIAL STROBE PULSE
SV V	; SERVO V REFERENCE
SWP	; SWITCHING PULSE
THRU1	; L : CYCLE THROUGH
THRU2	; L : WIDTH THROUGH
TST0 - 5	; TEST MODE
VISC/CMUTE	; PB VISC/CHROMA MUTE
W CLP	; WRITE CLAMP PULSE
WCK	; WRITE CLOCK
WZ	; WRITE ZERO
X13	; L : MORE THAN±13 TIMES NORMAL SPEED

OUTPUT

ADV VBLK	; Y ADD CONTROL
B/W BLK	; L : BLACK & WHITE REF BLANKING PULSE
BLACK INS	; H : BLACK REF INSERT PULSE
COMP BLK	; L : COMPOSITE BLANKING
CV/RV	; COUNTER V/RVL
DO0 - DO9	; OUTPUT VIDEO DATA 0 - 9
DOCLR	; WRITE H CLEAR PULSE
FF30/COFF	; L : MORE THAN +30 TIMES NORMAL SPEED/L : CHROMA OFF
FR30/HDL	; L : MORE THAN -30 TIMES NORMAL SPEED/L : CHROMA OFF /L : COLOR FRAMING DISCORD H SHIFT
HCLR0	; WRITE MEMORY LINE ADDRESS COUNTER CLEAR PULSE
HCLR1, 2	; READ MEMORY LINE ADDRESS COUNTER CLEAR PULSE
INC0	WRITE MEMORY LINE ADDRESS COUNTER CLOCK
INC1, 2	; READ MEMORY LINE ADDRESS COUNTER CLOCK
MRCK1, 2	; READ MEMORY CLOCK
MWCK	; WRITE MEMORY CLOCK
PDS CONT	; A/D CLAMP CONTROL
R VISC/ID	; L : VISCØ DET LINE (525 : 11-LINE, 625 : 8-LINE) /L : CF ID BLANKING PULSE (525 : 15-LINE, 625 : 12-LINE)
RBWLN	; BLACK/WHITE LEVEL DIFFERENCE INSERT LINE
RCK	; READ MEMORY ALTER CLOCK
RDIZ	; READ SYSTEM LINE ALTERNATE
SHW	; WINDOW TO DETECT HORIZONTAL SYNC
SPD PWM	; PB SPEED PWM
THRU/SECAM	; YSQ → L : ADD THROUGH CSQ → L : SECAM COMPOSITE V TOP
VBLK1	; L : V BLANKING PULSE
VBLK2	; L : ENR DOC INHIBIT PULSE
VCLR0	; WRITE MEMORY LINE ADDRESS COUNTER CLEAR PULSE
VCLR1, 2	; READ MEMORY LINE ADDRESS COUNTER CLEAR PULSE
VISCDT/FP2	; H : PB VISC PHASE COMPARISON ENABLE PULSE/H : CFID (-)
VISCEX/FP1	; L : PB VISC EXIST/H : CFID (+)
W O/E	; YSQ OUTPUT TO PB OE OF CSQ
WBLK	; VIDEO BLANKING USED IN DETECTING HORIZONTAL SYNC
WE	; L : WRITE ENABLE
WHITE CNT	; WHITE CONTROL
WHITE INS	; H : WHITE REF INSERT PULSE
WRITE V	; YSQ OUTPUT TO PB V OF CSQ
WVRST	; WRITE V COUNTER RESET PULSE

INPUT/OUTPUT

BID	; L : BIDIREX
BIDDIR	; H : FORWARD, L : REVERSE
F BID	; L : FAST BIDIREX
FFB	; L : FAST FORWARD BIDIREX
FRB	; L : FAST REVERSE BIDIREX
GB	; L : GUARD BAND
GH	; GATED H SYNC
NOSIG	; L : NO SIGNAL
PB16H	; ADVANCE WRITE ZERO RESET, 16 TIMES H RATE
PB2H	; PB V RESET, 2 TIMES H RATE
PBV	; Y NORMAL PB V REFERENCE PULSE
PSRZ	; PSEUDO READ ZERO
PSWZ	; PSEUDO WRITE ZERO
R ENP	; L : READ EXTRACT INHIBIT PULSE
RMAB	; READ EXTRACT PULSE
RV SET	; YSQ OUTPUT TO READ V OF CSQ
RVCLR	; READ V CLEAR LINE
SDO1	; STRETCHED DO PULSE
SDO2	; STRETCHED DO PULSE
TDT0	; TIME CODE DATA
W ENP	; L : WRITE EXTRACT INHIBIT PULSE
W VISC/ID	; L : PB VISC BLANKING PULSE (525 : 11-LINE, 625 : 8-LINE) /L : CF ID BLANKING PULSE (525 : 15-LINE, 625 : 12-LINE)
WDIZ	; WRITE SYSTEM LINE ALTERNATE
WMAB	; WRITE EXTRACT PULSE
WVCLR	; WRITE V CLEAR LINE

