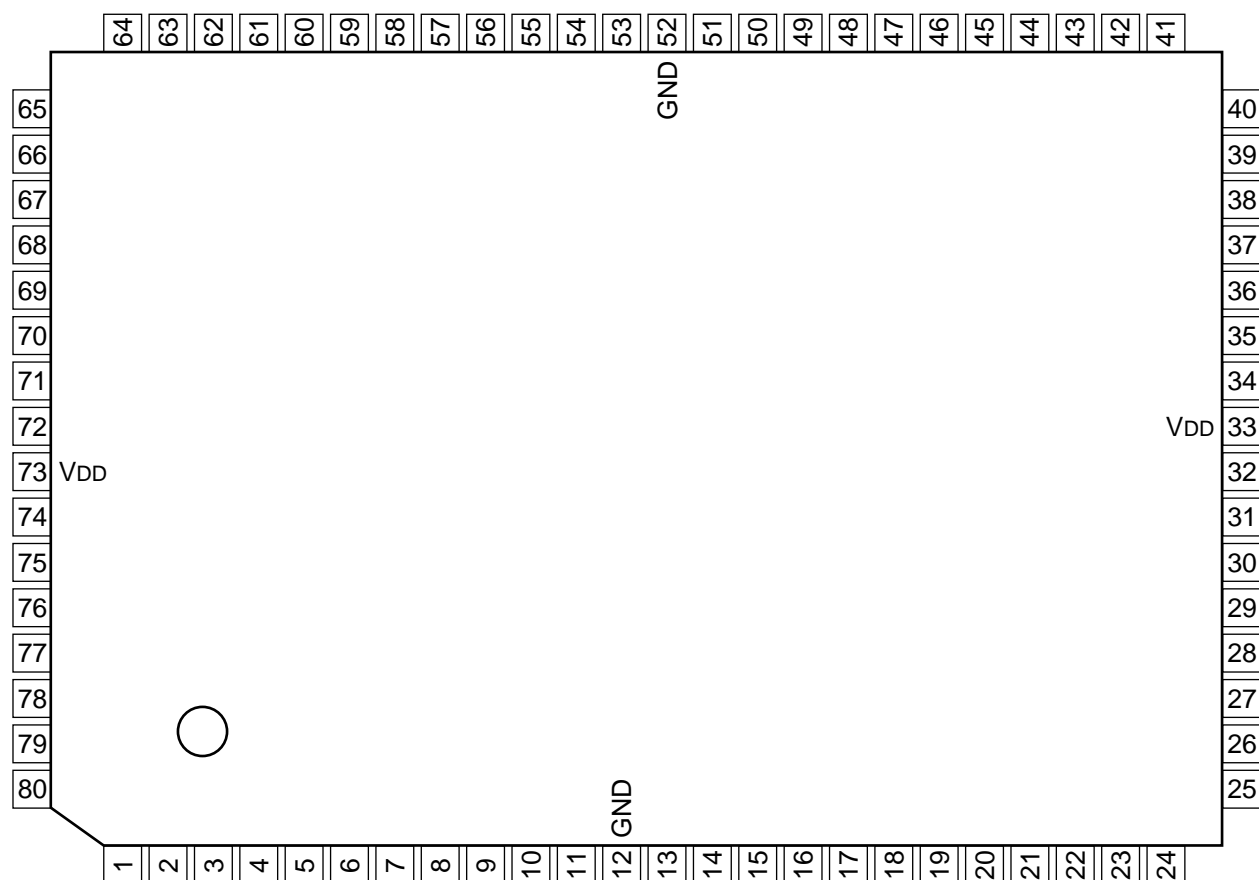
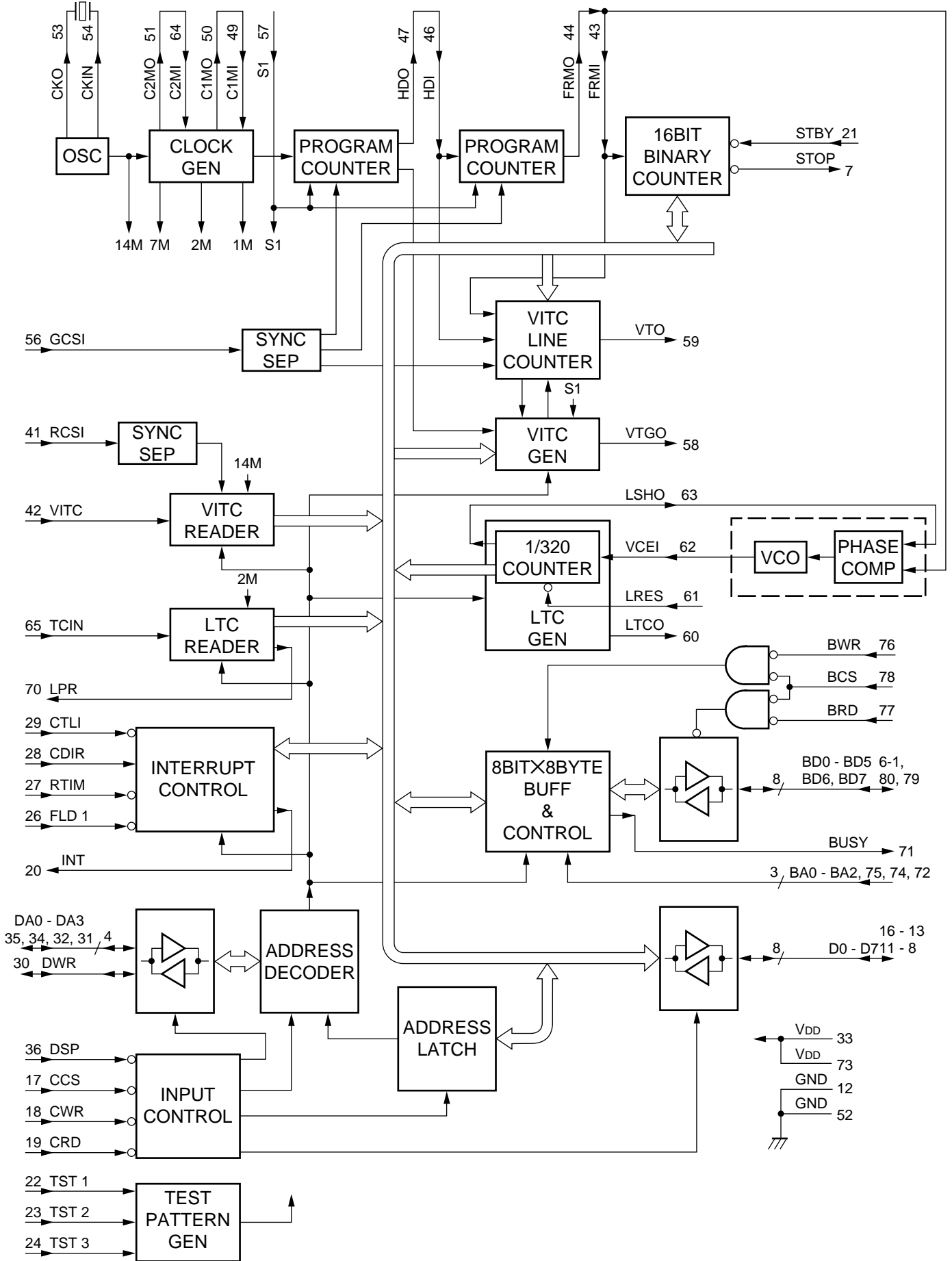


## C-MOS TIME CODE GENERATOR / READER

—TOP VIEW—



PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL
1	I/O	DB5	17	I	CCS	33	—	VDD	49	I	C1MI	65	I	TCIN
2	I/O	DB4	18	I	CWR	34	I/O	DA1	50	O	C1MO	66	O	DCLK
3	I/O	DB3	19	I	CRD	35	I/O	DA0	51	O	C2MO	67	O	DATA
4	I/O	DB2	20	O	INT	36	I	DSP	52	—	GND	68	O	RFLD
5	I/O	DB1	21	I	STBY	37	O	DTSE	53	O	CKO	69	O	RDSY
6	I/O	DB0	22	I	TST1	38	O	VRCK	54	I	CKIN	70	O	LRP
7	O	STOP	23	I	TST2	39	I	SLLM	55	I	SLCK	71	O	BUSY
8	I/O	D7	24	I	TST3	40	O	RVDO	56	I	GCSI	72	I	BA2
9	I/O	D6	25	I	PON	41	I	RCSI	57	I	S1	73	—	VDD
10	I/O	D5	26	I	FLD1	42	I	VITC	58	O	VTGO	74	I	BA1
11	I/O	D4	27	I	RTIM	43	I	FRMI	59	O	VTO	75	I	BA0
12	—	GND	28	I	CDIR	44	O	FRMO	60	O	LTGO	76	I	BWR
13	I/O	D3	29	I	CTLI	45	O	GLSY	61	I	LRES	77	I	BRD
14	I/O	D2	30	I/O	DWR	46	I	HDI	62	I	VCEI	78	I	BCS
15	I/O	D1	31	I/O	DA3	47	O	HDO	63	O	LSHO	79	I/O	BD7
16	I/O	D0	32	I/O	DA2	48	O	VDO	64	I	C2MI	80	I/O	BD6



**SIGNAL DESCRIPTION**

BA0 - BA2	B ADDRESS INPUTS
BCS	B CHIP ENABLE INPUT ("L" : ENABLE)
BD0 - BD7	B DATA I/O
BRD	B READ INPUT ("L" : READ)
BUSY	B BUSY OUTPUT
BWR	B WRITE INPUT ("L" : WRITE)
C1MI	SYSTEM CLOCK INPUT
C1MO	CLOCK 1 OUTPUT (CKIN × 1/16)
C2MI	LTC READ CLOCK INPUT
C2MO	CLOCK 2 OUTPUT (CKIN × 1/8)
CCS	C CHIP ENABLE INPUT ("L" : ENABLE) (when DSP is low) ADDRESS LATCH ENABLE INPUT ("L" : ENABLE) (when DSP is high)
CDIR	CTL DIRECTION INPUT
CKIN	SYSTEM CLOCK INPUT

VIDEO SIGNAL FORMAT	CKIN
SMPTE 29.97 Hz 525LINE	14.318 MHz
EBU 25 Hz 625LINE	14.500 MHz

CKO	CLOCK OUTPUT
CRD	C READ INPUT ("L" : READ)
CTLI	CTL SIGNAL INPUT
CWR	C WRITE INPUT ("L" : WRITE)
D0 - D7	DATA I/O (when DSP is low)/ ADDRESS INPUTS
DA0 - DA3	E ADDRESS INPUTS (when DSP is high) D ADDRESS OUTPUT (when DSP is low)
DATA	DEMODULATED SERIAL DATA OUTPUT
DCLK	DEMODULATED CLOCK OUTPUT
DSP	DISPLAY BUS SELECT INPUT DSP controls CCS, DA0-DA3 and DVR.
DTSE	VITC DATA SEARCH FLAG OUTPUT
DWR	WRITE ENABLE OUTPUT ("L" : ENABLE) (when DSP is low) E ADDRESS 4 INPUT (when DSP is high)
EA4	ADDRESS BUS INPUT
FLD1	FIELD REFERENCE INPUT ("L" : FILD 1)
FRMI	FRAME SIGNAL INPUT
FRMO	FRAME SIGNAL OUTPUT
GCSI	COMPOSITE SYNC INPUT
GLSY	LOST SYNC FLAG OUTPUT
HDI	HORIZONTAL SYNC INPUT
HDO	HORIZONTAL SYNC OUTPUT
INT	ITERRUPT REQUEST OUTPUT
LPR	LTC READ REQUEST OUTPUT
LRES	LTC COUNTER RESET INPUT ("L" : RESET)
LSHO	SYNCHRONOUS SIGNAL OUTPUT
LTCO	LTC SIGNAL OUTPUT
PON	SYSTEM RESET INPUT ("L" : PON)
RCSI	COMPOSITE SYNC INPUT
RDSY	READ SYNC WORD DATA OUTPUT
RESS	RESET INPUT ("L" : RTIM)
RFLD	FIELD DATA OUTPUT
RTIM	TIME ADDRESS RESET INPUT ("L" : RESET)
RVDO	VITC READ DATA OUTPUT

S1 SIGNAL FORMAT SELECT INPUT  
 "H" : NTSC/PAL-M 29.94Hz 525LINE  
 "L" : PAL/SECAM 25Hz 625LINE

SLCK SELECT CLOCK INPUT

SLCK	"L"		"H"	
CKIN	14.318 MHz	14.5 MHz	7.159 MHz	7.25 MHz
SPEC	SMPTE	EBU	SMPTE	EBU

SLLM READ SIZE SELECT INPUT  
 STBY STANDBY READ FLAG INPUT  
 STOP STOP OUTPUT ("L" : STOP)  
 TCIN LONGITUDINAL TIME AND CONTROL CODE INPUT  
 TST1 - TST3 TEST INPUTS  
 VCEI LTC CLOCK INPUT  
 VDO HORIZONTAL SYNC DRIVE OUTPUT  
 VITC VITC SIGNAL INPUT  
 VTGO VITC GATE SIGNAL OUTPUT  
 VTO VITC SIGNAL OUTPUT ("H" : VITC)