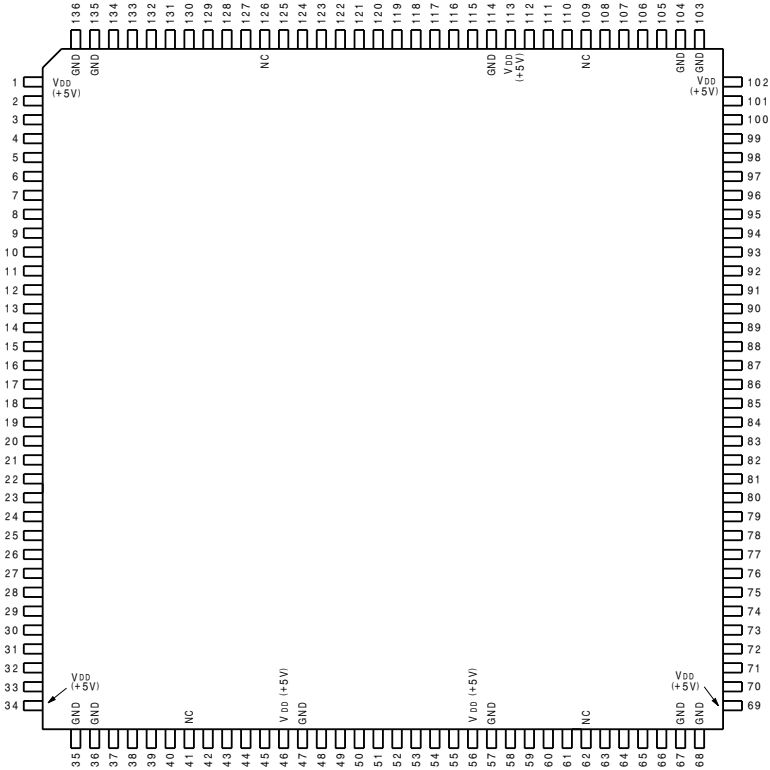
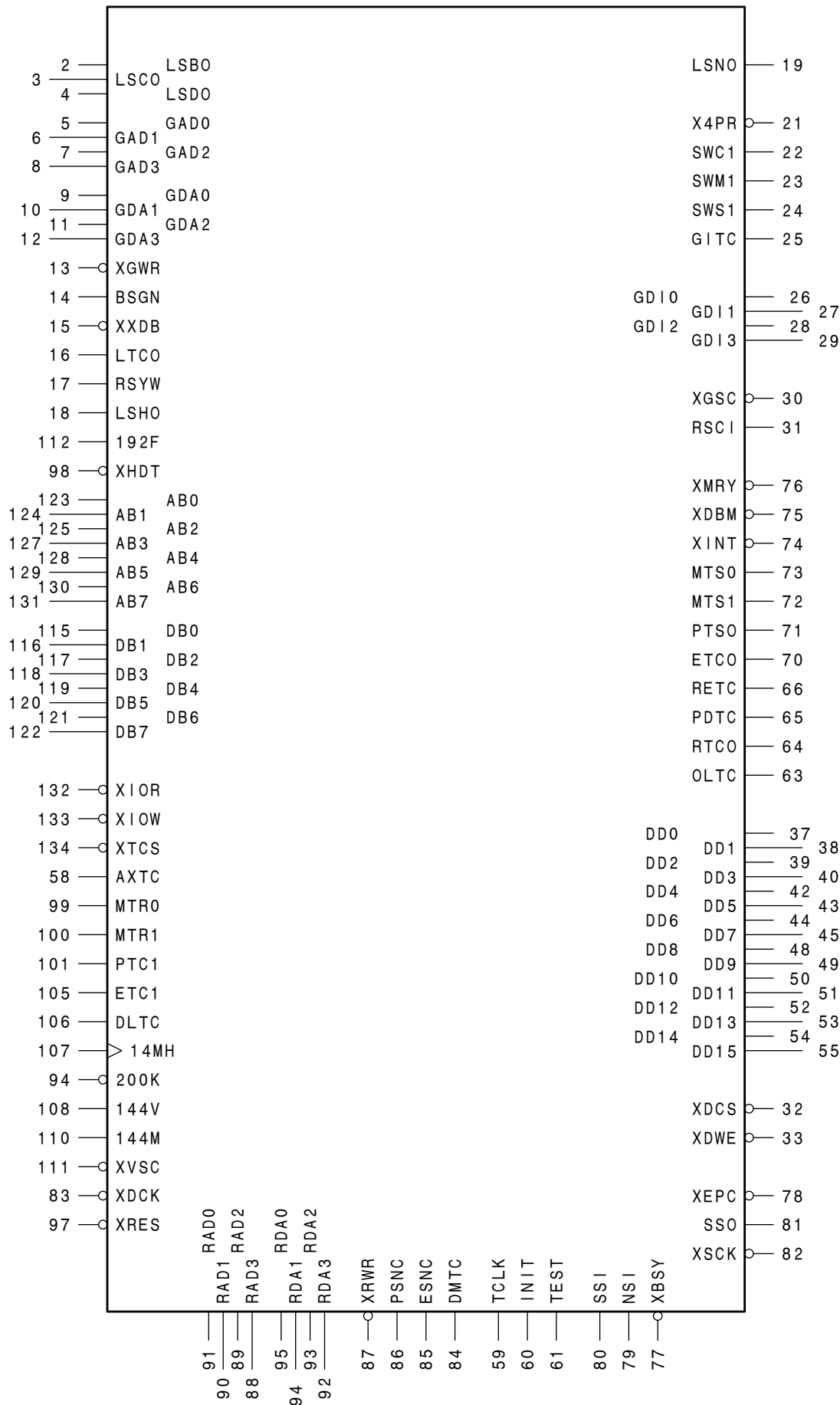


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C-MOS TC(TIME CODE) GENERATOR  
-TOP VIEW-



| PIN No. | I/O | SIGNAL | PIN No. | I/O | SIGNAL | PIN No. | I/O | SIGNAL | PIN No. | I/O | SIGNAL |
|---------|-----|--------|---------|-----|--------|---------|-----|--------|---------|-----|--------|
| 1       | -   | VDD    | 35      | -   | GND    | 69      | -   | VDD    | 103     | -   | GND    |
| 2       | I   | LSB0   | 36      | -   | GND    | 70      | 0   | ETC0   | 104     | -   | GND    |
| 3       | I   | LSC0   | 37      | 0   | DD0    | 71      | 0   | PTC0   | 105     | I   | ETC1   |
| 4       | I   | LSD0   | 38      | 0   | DD1    | 72      | 0   | MTS1   | 106     | I   | DLTC   |
| 5       | I   | GAD0   | 39      | 0   | DD2    | 73      | 0   | MTS0   | 107     | I   | 14MH   |
| 6       | I   | GAD1   | 40      | 0   | DD3    | 74      | 0   | XINT   | 108     | I   | 144V   |
| 7       | I   | GAD2   | 41      | -   | NC     | 75      | 0   | XDBM   | 109     | -   | NC     |
| 8       | I   | GAD3   | 42      | 0   | DD4    | 76      | 0   | XMRY   | 110     | I   | 144M   |
| 9       | I   | GDA0   | 43      | 0   | DD5    | 77      | I   | XBSY   | 111     | I   | XVSC   |
| 10      | I   | GDA1   | 44      | 0   | DD6    | 78      | 0   | XEPC   | 112     | I   | 192F   |
| 11      | I   | GDA2   | 45      | 0   | DD7    | 79      | I   | DSI    | 113     | -   | VDD    |
| 12      | I   | GDA3   | 46      | -   | VDD    | 80      | I   | SSI    | 114     | -   | GND    |
| 13      | I   | XGWR   | 47      | -   | GND    | 81      | 0   | SSO    | 115     | I/O | DB0    |
| 14      | I   | BSGN   | 48      | 0   | DD8    | 82      | 0   | XSCK   | 116     | I/O | DB1    |
| 15      | I   | XXDB   | 49      | 0   | DD9    | 83      | I   | XDCK   | 117     | I/O | DB2    |
| 16      | I   | LTC0   | 50      | 0   | DD10   | 84      | I   | DMTC   | 118     | I/O | DB3    |
| 17      | I   | RSYW   | 51      | 0   | DD11   | 85      | I   | ESNC   | 119     | I/O | DB4    |
| 18      | I   | LSHO   | 52      | 0   | DD12   | 86      | I   | PSNC   | 120     | I/O | DB5    |
| 19      | 0   | LSNO   | 53      | 0   | DD13   | 87      | I   | XRWR   | 121     | I/O | DB6    |
| 20      | 0   | GSNC   | 54      | 0   | DD14   | 88      | I   | RAD3   | 122     | I/O | DB7    |
| 21      | 0   | X4PR   | 55      | 0   | DD15   | 89      | I   | RAD2   | 123     | I   | AB0    |
| 22      | 0   | SWC1   | 56      | -   | VDD    | 90      | I   | RAD1   | 124     | I   | AB1    |
| 23      | 0   | SWM1   | 57      | -   | GND    | 91      | I   | RAD0   | 125     | I   | AB2    |
| 24      | 0   | SWS1   | 58      | I   | AXTC   | 92      | I   | RDA3   | 126     | -   | NC     |
| 25      | 0   | GITC   | 59      | I   | TCLK   | 93      | I   | RDA2   | 127     | I   | AB3    |
| 26      | 0   | GDI0   | 60      | I   | INIT   | 94      | I   | RDA1   | 128     | I   | AB4    |
| 27      | 0   | GDI1   | 61      | I   | TEST   | 95      | I   | RDA0   | 129     | I   | AB5    |
| 28      | 0   | GDI2   | 62      | -   | NC     | 96      | I   | 200K   | 130     | I   | AB6    |
| 29      | 0   | GDI3   | 63      | 0   | OLTC   | 97      | I   | XRES   | 131     | I   | AB7    |
| 30      | 0   | XGSC   | 64      | 0   | RTC0   | 98      | I   | XHDT   | 132     | I   | X10R   |
| 31      | 0   | RSC1   | 65      | 0   | PDTC   | 99      | I   | MTR0   | 133     | I   | X10W   |
| 32      | 0   | XDCS   | 66      | 0   | RETC   | 100     | I   | MTR1   | 134     | I   | XTCS   |
| 33      | 0   | XDWE   | 67      | -   | GND    | 101     | I   | PTC1   | 135     | -   | GND    |
| 34      | -   | VDD    | 68      | -   | GND    | 102     | -   | VDD    | 136     | -   | GND    |



## INPUT

14MH :14.318MHz IN  
 144M :1.44MHz CLK IN  
 144V :1.44MHz VARI CLK IN  
 192F :192Fs IN  
 200K :200KHz CLOCK IN  
 AB0-AB7 :ADDRESS BUS FROM CPU (0-7)  
 AXTC :AUX TC (REGENE TC) IN  
 BSGN :GENERATOR BUSY SIGNAL IN  
 DLTC :DELAYED TC IN  
 DMTC :DUMMY TC OUT  
 DSI :DET SERIAL DATA IN  
 ESNC :EXT TC SYNC IN  
 ETC1 :EXT TC IN  
 GAD0-GAD3 :GENERATOR ADDRESS DATA IN (0-3)  
 GDA0-GDA3 :GENERATOR DATA IN (0-3)  
 INIT :TEST (VDD)  
 LSBO :SYNCHRONOUS SIGNAL B IN  
 LSCO :SYNCHRONOUS SIGNAL C IN  
 LSDO :SYNCHRONOUS SIGNAL D IN  
 LSHO :LTC SYNCHRONOUS SIGNAL H IN  
 LTCO :GENERATOR LTC IN  
 MTR0-MTR1 :LEVEL METER DATA IN (0-1)  
 PSNC :PB TC SYNC IN  
 PTC1 :PB TC IN  
 RAD0-RAD3 :READER ADDRESS DATA IN (0-3)  
 RDA0-RDA3 :READER DATA IN (0-3)  
 RSYW :READ SYNC WORD IN  
 SSI :SERIAL SIGNAL DATA IN  
 TCLK :TEST (GND)  
 TEST :TEST (GND)  
 $\overline{\text{XBSY}}$  :BUSY SIGNAL IN  
 $\overline{\text{XDCK}}$  :DET DATA SHIFT CLOCK  
 $\overline{\text{XGWR}}$  :GENERATOR WRITE SIGNAL IN  
 $\overline{\text{XHDT}}$  :HEAD TOUCH IN  
 $\overline{\text{XIOR}}$  :I/O READ  
 $\overline{\text{XIOW}}$  :I/O WRITE  
 $\overline{\text{XRES}}$  :RESET  
 $\overline{\text{XRWR}}$  :READER WRITE SIGNAL IN  
 $\overline{\text{XTCS}}$  :CHIP SELECT  
 $\overline{\text{XXDB}}$  :EXTERNAL DATA BUS IN FLAG IN  
 $\overline{\text{XVSC}}$  :VIDEO SYNC IN

## OUTPUT

DD0-DD15 :ADDRESS DATA FOR DELAY RAM (0-15)  
 ETCO :EXT TC OUT  
 GD10-GD13 :GENERATOR DATA OUT (0-3)  
 GITC :GENERATOR READ TC OUT  
 GSNC :GENERATOR SYNC OUT  
 LSNO :LTC SYNCHRONOUS SIGNAL H/N IN  
 MTS0-MTS1 :METER SELECT (0-1)  
 OLTG :LINE OUT TC  
 PDTG :PRE DELAY TC OUT  
 PTCO :PB READER OUT TC  
 RETC :REPRO TC OUT  
 RSCI :READER SYSTEM CLOCK OUT  
 RTCO :REC TC OUT  
 SSO :SERIAL SIGNAL DATA OUT  
 SWCI :SWITCHES SIGNAL V IN  
 SWM1 :SWITCHES SIGNAL M IN  
 SWSI :SWITCHES SIGNAL S IN  
 $\overline{\text{X4PR}}$  :4 PRESTRIPE ON  
 $\overline{\text{XDBM}}$  :XXDB MONITOR OUT  
 $\overline{\text{XDCS}}$  :SRAM CHIP SELECT FOR DELAY RAM  
 $\overline{\text{XDWE}}$  :SRAM CHIP SELECT FOR DELAY RAM  
 $\overline{\text{XEPC}}$  :EEPROM CS OUT  
 $\overline{\text{XGSC}}$  :GENERATOR FRAME SYNC OUT  
 $\overline{\text{XINT}}$  :INTERRUPT OUT  
 $\overline{\text{XMRV}}$  :READY SIGNAL OUT  
 $\overline{\text{XSCK}}$  :SHIFT CLOCK OUT

## INPUT/OUTPUT

DB0-DB7 :DATA BUS FROM CPU