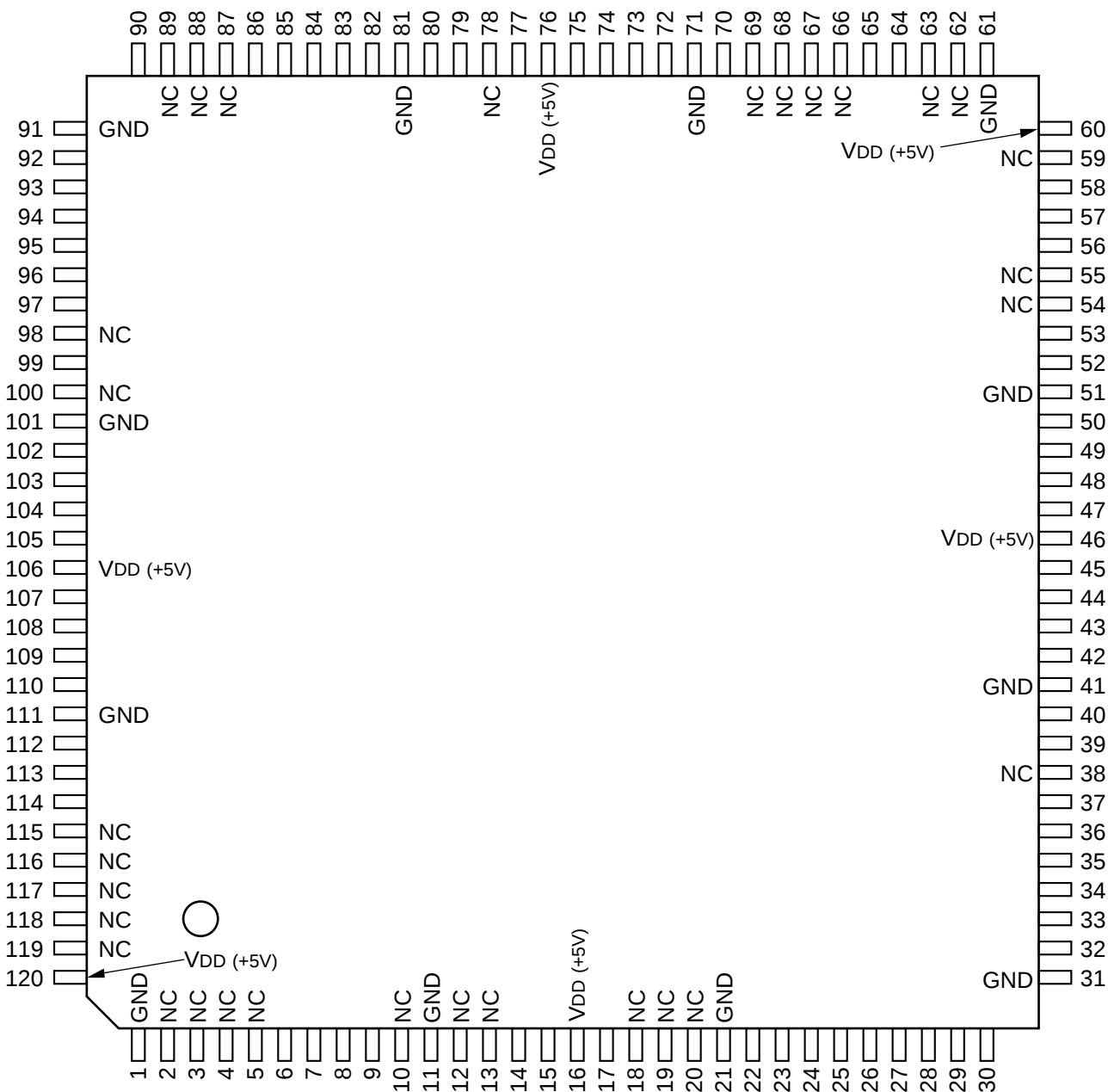


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# C-MOS SAMPLING RATE CONVERSION FILTER

—TOP VIEW—



(V<sub>DD</sub> = +5V)

| PIN No. | I/O | SIGNAL          | PIN No. | I/O | SIGNAL          | PIN No. | I/O | SIGNAL          |
|---------|-----|-----------------|---------|-----|-----------------|---------|-----|-----------------|
| 1       | —   | GND             | 41      | —   | GND             | 81      | —   | GND             |
| 2       | —   | NC              | 42      | O   | DO2             | 82      | I   | A3              |
| 3       | —   | NC              | 43      | O   | DO3             | 83      | I   | A2              |
| 4       | —   | NC              | 44      | O   | DO4             | 84      | I   | A1              |
| 5       | —   | NC              | 45      | O   | DO5             | 85      | I   | A0              |
| 6       | I   | SI0             | 46      | —   | V <sub>DD</sub> | 86      | I   | EXTA            |
| 7       | I   | SI1             | 47      | O   | DO6             | 87      | —   | NC              |
| 8       | I   | SI2             | 48      | O   | DO7             | 88      | —   | NC              |
| 9       | I   | SI3             | 49      | O   | DO8             | 89      | —   | NC              |
| 10      | —   | NC              | 50      | O   | DO9             | 90      | O   | DOEN            |
| 11      | —   | GND             | 51      | —   | GND             | 91      | —   | GND             |
| 12      | —   | NC              | 52      | O   | DO10            | 92      | I   | TSA0            |
| 13      | —   | NC              | 53      | O   | DO11            | 93      | I   | TSA1            |
| 14      | I   | AISA            | 54      | —   | NC              | 94      | I   | TSA2            |
| 15      | I   | AISB            | 55      | —   | NC              | 95      | I   | MRSC            |
| 16      | —   | V <sub>DD</sub> | 56      | I   | FI0             | 96      | I   | TESTH           |
| 17      | I   | PRINV           | 57      | I   | FI1             | 97      | I   | DDOTS           |
| 18      | —   | NC              | 58      | I   | FI2             | 98      | —   | NC              |
| 19      | —   | NC              | 59      | —   | NC              | 99      | I   | CLK1            |
| 20      | —   | NC              | 60      | —   | V <sub>DD</sub> | 100     | —   | NC              |
| 21      | —   | GND             | 61      | —   | GND             | 101     | —   | GND             |
| 22      | O   | SO0             | 62      | —   | NC              | 102     | I   | DI10            |
| 23      | O   | SO1             | 63      | —   | NC              | 103     | I   | DI9             |
| 24      | O   | SO2             | 64      | I   | SYSEL           | 104     | I   | DI8             |
| 25      | O   | SO3             | 65      | I   | RMODE           | 105     | I   | DI7             |
| 26      | I   | TD0             | 66      | —   | NC              | 106     | —   | V <sub>DD</sub> |
| 27      | I   | TD1             | 67      | —   | NC              | 107     | I   | DI6             |
| 28      | I   | TD2             | 68      | —   | NC              | 108     | I   | DI5             |
| 29      | I   | TD3             | 69      | —   | NC              | 109     | I   | DI4             |
| 30      | I   | TD4             | 70      | I   | CLK2            | 110     | I   | DI3             |
| 31      | —   | GND             | 71      | —   | GND             | 111     | —   | GND             |
| 32      | I   | TD5             | 72      | I   | CALT            | 112     | I   | DI2             |
| 33      | I   | TD6             | 73      | —   | NC              | 113     | I   | DI1             |
| 34      | I   | TD7             | 74      | I   | OBDSEL          | 114     | I   | DI0             |
| 35      | I   | TD8             | 75      | I   | OBFRST          | 115     | —   | NC              |
| 36      | I   | TD9             | 76      | —   | V <sub>DD</sub> | 116     | —   | NC              |
| 37      | I   | TD10            | 77      | I   | EXSEN           | 117     | —   | NC              |
| 38      | —   | NC              | 78      | —   | NC              | 118     | —   | NC              |
| 39      | O   | DO0             | 79      | I   | A5              | 119     | —   | NC              |
| 40      | O   | DO1             | 80      | I   | A4              | 120     | —   | V <sub>DD</sub> |

|     |        |       |    |
|-----|--------|-------|----|
| 102 | DI10   | DO11  | 53 |
| 103 | DI9    | DO10  | 52 |
| 104 | DI8    | DO9   | 50 |
| 105 | DI7    | DO8   | 49 |
| 107 | DI6    | DO7   | 48 |
| 108 | DI5    | DO6   | 47 |
| 109 | DI4    | DO5   | 45 |
| 110 | DI3    | DO4   | 44 |
| 112 | DI2    | DO3   | 43 |
| 113 | DI1    | DO2   | 42 |
| 114 | DI0    | DO1   | 40 |
|     |        | DO0   | 39 |
| 9   | SI3    |       |    |
| 8   | SI2    | SO3   | 25 |
| 7   | SI1    | SO2   | 24 |
| 6   | SI0    | SO1   | 23 |
|     |        | SO0   | 22 |
| 79  | A5     |       |    |
| 80  | A4     |       |    |
| 82  | A3     | DOEN  | 90 |
| 83  | A2     |       |    |
| 84  | A1     | TD10  | 37 |
| 85  | A0     | TD9   | 36 |
|     |        | TD8   | 35 |
| 58  | FI2    | TD7   | 34 |
| 57  | FI1    | TD6   | 33 |
| 56  | FI0    | TD5   | 32 |
|     |        | TD4   | 30 |
| 14  | AISA   | TD3   | 29 |
| 15  | AISB   | TD2   | 28 |
|     |        | TD1   | 27 |
| 17  | PRINV  | TD0   | 26 |
| 65  | RMODE  |       |    |
| 64  | CYSEL  | TSA2  | 94 |
| 72  | CALT   | TSA1  | 93 |
| 77  | EXSEN  | TSA0  | 92 |
| 86  | EXTA   |       |    |
| 95  | MRSC   | TESTH | 96 |
| 70  | CLK2   | DDOTS | 97 |
| 99  | CLK1   |       |    |
| 74  | OBDSEL |       |    |
| 75  | OBFRST |       |    |

**INPUT**

|             |                                                         |
|-------------|---------------------------------------------------------|
| A0 - A5     | ; EXT. ADDRESS                                          |
| AISA        | ; ADDRESS COUNTER A RESET                               |
| AISB        | ; ADDRESS COUNTER B RESET                               |
| CALT        | ; PHASE OF INPUT DATA OF CHROMA                         |
| CLK1        | ; INPUT SAMPLING CLOCK                                  |
| CLK2        | ; OUTPUT SAMPLING CLOCK                                 |
| CYSEL       | ; Y/C SELECT (L: LUMINANCE)                             |
| DDOTS       | ; TEST FIFO                                             |
| DI0 - DI10  | ; VIDEO DATA                                            |
| EXSEN       | ; DATA SHIFT ENABLE                                     |
| EXTA        | ; EXT. ADDRESS MODE SELECT                              |
| FI0 - FI2   | ; FIFO START ADDRESS SET                                |
| MRSC        | ; OUTPUT CODE (L: OFFSET BINARY)<br>(H: 2's COMPLIMENT) |
| OBDSEL      | ; OUTPUT RESET TIMING                                   |
| OBFRST      | ; INPUT RESET TIMING                                    |
| PRINV       | ; H: INVERT OF ALT PULSE PHASE                          |
| RMODE       | ; L: D1 TO D2, H: D2 TO D1                              |
| SI0 - SI3   | ; AUX. DATA                                             |
| TD0 - TD10  | ; TEST DATA                                             |
| TESTH       | ; TEST MULTIPLIER                                       |
| TSA0 - TSA2 | ; TEST MULTIPLIER                                       |

**OUTPUT**

|            |              |
|------------|--------------|
| DO0 - DO11 | ; VIDEO DATA |
| DOEN       | ; TEST FIFO  |
| SO0 - SO3  | ; AUX. DATA  |

