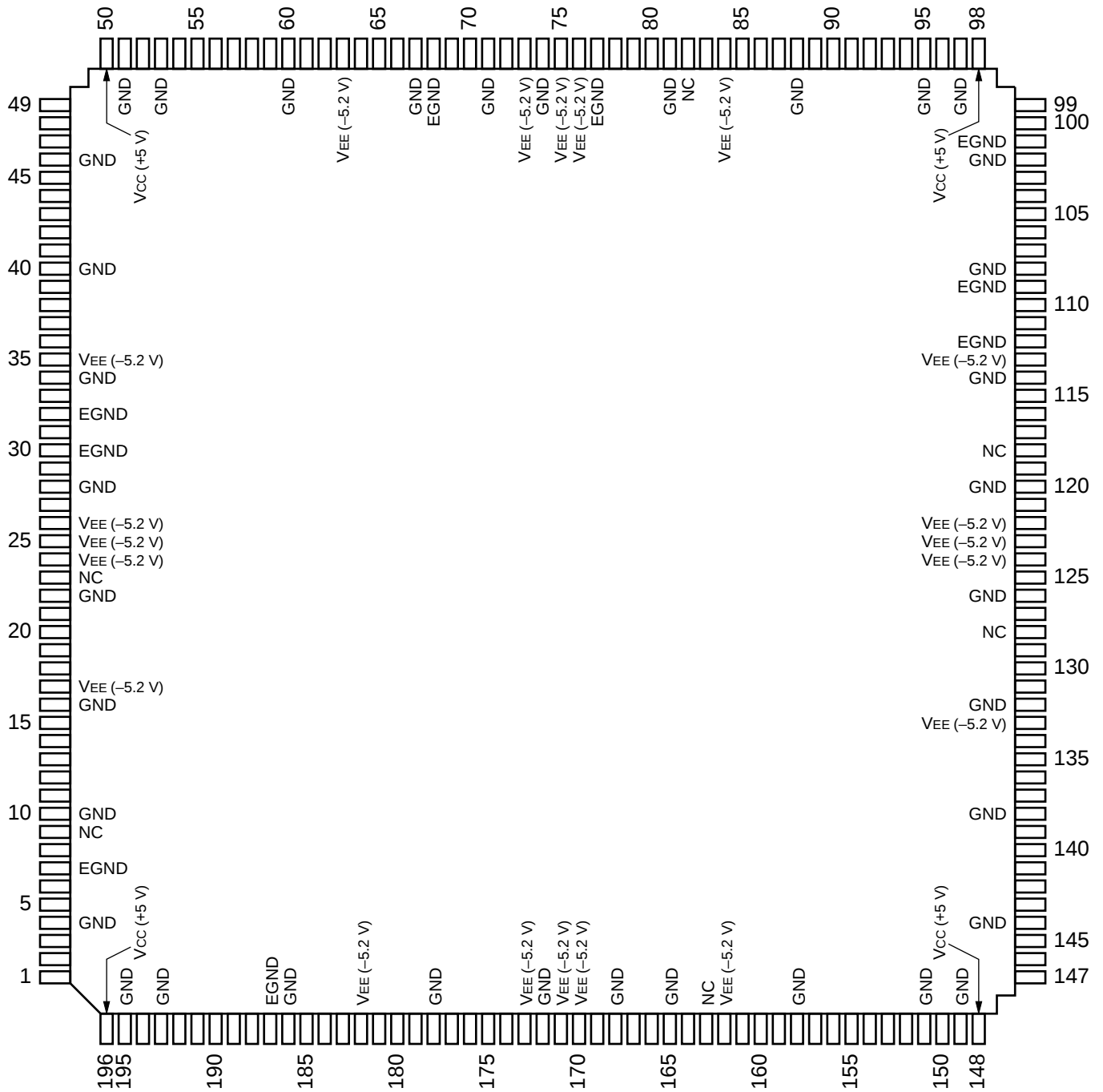


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## CROSSPOINT SWITCH

-TOP VIEW-



(V<sub>CC</sub> = +5 V  
V<sub>EE</sub> = -5.2 V)

| PIN No. | I/O | SIGNAL          | PIN No. | I/O | SIGNAL          | PIN No. | I/O | SIGNAL          | PIN No. | I/O | SIGNAL          | PIN No. | I/O | SIGNAL          | PIN No. | I/O | SIGNAL          | PIN No. | I/O | SIGNAL          |
|---------|-----|-----------------|---------|-----|-----------------|---------|-----|-----------------|---------|-----|-----------------|---------|-----|-----------------|---------|-----|-----------------|---------|-----|-----------------|
| 1       | I   | OUTADD0         | 29      | I   | XDIN22          | 57      | I   | XDIN4           | 85      | O   | DOUT4           | 113     | –   | V <sub>EE</sub> | 141     | I   | DIN7            | 169     | I   | DIN24           |
| 2       | I   | OUTADD1         | 30      | –   | EGND            | 58      | I   | XDIN3           | 86      | O   | DOUT5           | 114     | –   | GND             | 142     | I   | DIN8            | 170     | –   | V <sub>EE</sub> |
| 3       | I   | OUTADD2         | 31      | O   | ACTEST          | 59      | I   | XDIN2           | 87      | O   | DOUT6           | 115     | O   | DOUT23          | 143     | I   | DIN9            | 171     | –   | V <sub>EE</sub> |
| 4       | –   | GND             | 32      | –   | EGND            | 60      | –   | GND             | 88      | –   | GND             | 116     | O   | DOUT24          | 144     | –   | GND             | 172     | –   | GND             |
| 5       | I   | OUTADD3         | 33      | I   | XDIN21          | 61      | I   | XDIN0           | 89      | O   | DOUT7           | 117     | O   | DOUT25          | 145     | I   | DIN10           | 173     | –   | V <sub>EE</sub> |
| 6       | O   | ACTEST          | 34      | –   | GND             | 62      | I   | XDIN1           | 90      | O   | DOUT8           | 118     | –   | NC              | 146     | –   | THDIODE         | 174     | I   | DIN25           |
| 7       | –   | EGND            | 35      | –   | V <sub>EE</sub> | 63      | –   | V <sub>EE</sub> | 91      | O   | DOUT9           | 119     | O   | DOUT26          | 147     | –   | THDIODE         | 175     | I   | DIN26           |
| 8       | I   | XDIN26          | 36      | I   | XDIN20          | 64      | O   | VBB1            | 92      | O   | DOUT10          | 120     | –   | GND             | 148     | –   | V <sub>CC</sub> | 176     | I   | DIN27           |
| 9       | –   | NC              | 37      | I   | XDIN19          | 65      | I   | MDCLKN          | 93      | O   | DOUT11          | 121     | O   | DOUT27          | 149     | –   | GND             | 177     | I   | DIN28           |
| 10      | –   | GND             | 38      | I   | XDIN18          | 66      | I   | MDCLK           | 94      | O   | DOUT12          | 122     | –   | V <sub>EE</sub> | 150     | I   | DIN11           | 178     | –   | GND             |
| 11      | I   | XDIN25          | 39      | I   | XDIN17          | 67      | –   | GND             | 95      | –   | GND             | 123     | –   | V <sub>EE</sub> | 151     | –   | GND             | 179     | I   | DIN29           |
| 12      | I   | XDIN24          | 40      | –   | GND             | 68      | –   | EGND            | 96      | O   | DOUT13          | 124     | –   | V <sub>EE</sub> | 152     | I   | DIN12           | 180     | I   | DIN30           |
| 13      | I   | OUTADD4         | 41      | I   | XDIN16          | 69      | I   | SDCLKN          | 97      | –   | GND             | 125     | O   | DOUT28          | 153     | I   | DIN13           | 181     | I   | DIN31           |
| 14      | I   | INADD0          | 42      | I   | XDIN15          | 70      | I   | SDCLK           | 98      | –   | V <sub>CC</sub> | 126     | –   | GND             | 154     | I   | DIN14           | 182     | –   | V <sub>EE</sub> |
| 15      | I   | INADD1          | 43      | I   | XDIN14          | 71      | –   | GND             | 99      | O   | DOUT14          | 127     | O   | DOUT29          | 155     | I   | DIN15           | 183     | I   | XDIN31          |
| 16      | –   | GND             | 44      | I   | XDIN13          | 72      | O   | VBB2            | 100     | O   | DOUT15          | 128     | –   | NC              | 156     | I   | DIN16           | 184     | I   | XDIN30          |
| 17      | –   | V <sub>EE</sub> | 45      | I   | XDIN12          | 73      | –   | V <sub>EE</sub> | 101     | –   | EGND            | 129     | O   | DOUT30          | 157     | I   | DIN17           | 185     | I   | XDIN29          |
| 18      | I   | INADD2          | 46      | –   | GND             | 74      | –   | GND             | 102     | –   | GND             | 130     | O   | DOUT31          | 158     | –   | GND             | 186     | –   | GND             |
| 19      | I   | INADD3          | 47      | I   | XDIN11          | 75      | –   | V <sub>EE</sub> | 103     | O   | DOUT16          | 131     | I   | DIN0            | 159     | I   | DIN18           | 187     | –   | EGND            |
| 20      | I   | INADD4          | 48      | I   | XDIN10          | 76      | –   | V <sub>EE</sub> | 104     | O   | DOUT17          | 132     | –   | GND             | 160     | I   | DIN19           | 188     | I   | CNFGCLK         |
| 21      | I   | INADD5          | 49      | I   | XDIN9           | 77      | –   | EGND            | 105     | O   | DOUT18          | 133     | –   | V <sub>EE</sub> | 161     | I   | DIN20           | 189     | I   | CNFGSTB         |
| 22      | –   | GND             | 50      | –   | V <sub>CC</sub> | 78      | O   | DOUT0           | 106     | O   | DOUT19          | 134     | I   | DIN2            | 162     | –   | V <sub>EE</sub> | 190     | I   | OAEN            |
| 23      | –   | NC              | 51      | –   | GND             | 79      | O   | DOUT1           | 107     | O   | DOUT20          | 135     | I   | DIN1            | 163     | –   | NC              | 191     | I   | RESET           |
| 24      | –   | V <sub>EE</sub> | 52      | I   | XDIN8           | 80      | O   | DOUT2           | 108     | –   | GND             | 136     | I   | DIN3            | 164     | I   | DIN21           | 192     | I   | XDIN28          |
| 25      | –   | V <sub>EE</sub> | 53      | –   | GND             | 81      | –   | GND             | 109     | –   | EGND            | 137     | I   | DIN4            | 165     | –   | GND             | 193     | –   | GND             |
| 26      | –   | V <sub>EE</sub> | 54      | I   | XDIN7           | 82      | –   | NC              | 110     | O   | DOUT21          | 138     | –   | GND             | 166     | I   | DIN22           | 194     | I   | XDIN27          |
| 27      | I   | XDIN23          | 55      | I   | XDIN6           | 83      | O   | DOUT3           | 111     | O   | DOUT22          | 139     | I   | DIN5            | 167     | I   | GIN23           | 195     | –   | GND             |
| 28      | –   | GND             | 56      | I   | XDIN5           | 84      | –   | V <sub>EE</sub> | 112     | –   | EGND            | 140     | I   | DIN6            | 168     | –   | GND             | 196     | –   | V <sub>CC</sub> |

|     |         |     |       |        |     |
|-----|---------|-----|-------|--------|-----|
| 61  | XDIN0   | 131 | DIN0  | DOUT0  | 78  |
| 62  | XDIN1   | 135 | DIN1  | DOUT1  | 79  |
| 59  | XDIN2   | 134 | DIN2  | DOUT2  | 80  |
| 58  | XDIN3   | 136 | DIN3  | DOUT3  | 83  |
| 57  | XDIN4   | 137 | DIN4  | DOUT4  | 85  |
| 56  | XDIN5   | 139 | DIN5  | DOUT5  | 86  |
| 55  | XDIN6   | 140 | DIN6  | DOUT6  | 87  |
| 54  | XDIN7   | 141 | DIN7  | DOUT7  | 89  |
| 52  | XDIN8   | 142 | DIN8  | DOUT8  | 90  |
| 49  | XDIN9   | 143 | DIN9  | DOUT9  | 91  |
| 48  | XDIN10  | 145 | DIN10 | DOUT10 | 92  |
| 47  | XDIN11  | 150 | DIN11 | DOUT11 | 93  |
| 45  | XDIN12  | 152 | DIN12 | DOUT12 | 94  |
| 44  | XDIN13  | 153 | DIN13 | DOUT13 | 96  |
| 43  | XDIN14  | 154 | DIN14 | DOUT14 | 99  |
| 42  | XDIN15  | 155 | DIN15 | DOUT15 | 100 |
| 41  | XDIN16  | 156 | DIN16 | DOUT16 | 103 |
| 39  | XDIN17  | 157 | DIN17 | DOUT17 | 104 |
| 38  | XDIN18  | 159 | DIN18 | DOUT18 | 105 |
| 37  | XDIN19  | 160 | DIN19 | DOUT19 | 106 |
| 36  | XDIN20  | 161 | DIN20 | DOUT20 | 107 |
| 33  | XDIN21  | 164 | DIN21 | DOUT21 | 110 |
| 29  | XDIN22  | 166 | DIN22 | DOUT22 | 111 |
| 27  | XDIN23  | 167 | DIN23 | DOUT23 | 115 |
| 12  | XDIN24  | 169 | DIN24 | DOUT24 | 116 |
| 11  | XDIN25  | 174 | DIN25 | DOUT25 | 117 |
| 8   | XDIN26  | 175 | DIN26 | DOUT26 | 119 |
| 194 | XDIN27  | 176 | DIN27 | DOUT27 | 121 |
| 192 | XDIN28  | 177 | DIN28 | DOUT28 | 125 |
| 185 | XDIN29  | 179 | DIN29 | DOUT29 | 127 |
| 184 | XDIN30  | 180 | DIN30 | DOUT30 | 129 |
| 183 | XDIN31  | 181 | DIN31 | DOUT31 | 130 |
| 66  | MDCLK   | 66  |       |        |     |
| 65  | MDCLKN  | 65  |       | VBB1   | 64  |
| 70  | SDCLK   | 70  |       | VBB2   | 72  |
| 69  | SDCLKN  | 69  |       |        |     |
| 188 | CNFGCLK | 188 |       |        |     |
| 14  | INADD0  |     |       |        |     |
| 15  | INADD1  |     |       |        |     |
| 18  | INADD2  |     |       |        |     |
| 19  | INADD3  |     |       |        |     |
| 20  | INADD4  |     |       |        |     |
| 21  | INADD5  |     |       |        |     |
| 191 | RESET   |     |       |        |     |
| 1   | OUTADD0 |     |       |        |     |
| 2   | OUTADD1 |     |       |        |     |
| 3   | OUTADD2 |     |       |        |     |
| 5   | OUTADD3 |     |       |        |     |
| 13  | OUTADD4 |     |       |        |     |
| 190 | OAEN    |     |       |        |     |
| 189 | CNFGSTB |     |       |        |     |

## INPUT

|                   |                                                |
|-------------------|------------------------------------------------|
| CNFGCLK           | ; ADDRESS CONFIGURATION CLOCK                  |
| CNFGSTB           | ; RECONFIGURATION ENABLE                       |
| DIN0 – DIN31      | ; DATA INPUTS                                  |
| INADD0 – INADD5   | ; ADDRESS DATA INPUTS                          |
| MDCLK, MDCLKN     | ; MASTER LATCH CLOCK                           |
| OAEN              | ; OUTPUT ADDRESS ENABLE                        |
| OUTADD0 – OUTADD4 | ; OUTPUT CONFIGURATION REGISTER ADDRESS INPUTS |
| RESET             | ; CHIP RESET                                   |
| SDCLK, SDCLKN     | ; SLAVE LATCH CLOCK                            |
| XDIN0 – XDIN31    | ; EXPANSION DATA INPUTS                        |

## OUTPUT

|                |                               |
|----------------|-------------------------------|
| ACTEST         | ; TEST                        |
| DOUT0 – DOUT31 | ; DATA OUTPUTS                |
| VBB1, VBB2     | ; REFERENCE THRESHOLD VOLTAGE |

