

| Pad ring segment 1 |          |      |            |                    |      |           |               |            |
|--------------------|----------|------|------------|--------------------|------|-----------|---------------|------------|
| Pad                | Location |      | Name       | Description        | Part | Direction | Cell          | Type       |
|                    | x        | y    |            |                    |      |           |               |            |
| 1                  | 64.35    | 75.4 | temp       | Temperature sensor |      |           | DirectPad_140 | Direct pad |
| 2                  | 164.35   | 75.4 | gnda!      | analogue ground    |      | I/O       | AGND3ALLP140  | Power      |
| 3                  | 264.35   | 75.4 | gnda!      | analogue ground    |      | I/O       | AGND3ALLP140  | Power      |
| 4                  | 364.35   | 75.4 | gnda!      | analogue ground    |      | I/O       | AGND3ALLP140  | Power      |
| 5                  | 464.35   | 75.4 | gnda_probe | analogue ground    |      | I/O       | AGND3ALLP140  | Power      |
| 6                  | 564.35   | 75.4 | gnda_probe | analogue ground    |      |           | AGND3ALLP140  | Power      |
| 7                  | 664.35   | 75.4 | vdda_probe | Analogue power     |      |           | AVDD3ALLP140  | Power      |
| 8                  | 764.35   | 75.4 | vdda_probe | Analogue power     |      |           | AVDD3ALLP140  | Power      |
| 9                  | 864.35   | 75.4 | vdda!      | Analogue power     |      |           | AVDD3ALLP140  | Power      |
| 10                 | 964.35   | 75.4 | vdda!      | Analogue power     |      |           | AVDD3ALLP140  | Power      |

|    |         |      |                   |                                    |  |     |              |       |
|----|---------|------|-------------------|------------------------------------|--|-----|--------------|-------|
| 11 | 1064.35 | 75.4 | vdda!             | Analogue power                     |  |     | AVDD3ALLP140 | Power |
| 12 | 1164.35 | 75.4 | v_disc_ref1       | VdiscriRef1, . Test pad (1)        |  | I/O | APRIOP140    |       |
| 13 | 1264.35 | 75.4 | v_disc_ref1_probe | VdiscriRef1, . Test pad (1)        |  |     | ProbePadL140 |       |
| 14 | 1364.35 | 75.4 | v_disc_ref2       | VdiscriRef2, Test pad (1)          |  | I/O | APRIOP140    |       |
| 15 | 1464.35 | 75.4 | v_disc_ref2_probe | VdiscriRef1, . Test pad (1)        |  |     | ProbePadL140 |       |
| 16 | 1564.35 | 75.4 | i_test            | Current reference of DAC, test pad |  | O   | APRIOP140    |       |
| 17 | 1664.35 | 75.4 | gnda!             | analogue ground                    |  |     | AGND3ALLP140 | Power |
| 18 | 1764.35 | 75.4 | v_disc_clp        | VdiscriClp, Test pad (1)           |  | I/O | APRIOP140    |       |
| 19 | 1864.35 | 75.4 | vdda!             | Analogue power                     |  |     | AVDD3ALLP140 | Power |
| 20 | 1964.35 | 75.4 | vdda!             | Analogue power                     |  |     | AVDD3ALLP140 | Power |

|    |         |      |       |                             |  |  |               |            |
|----|---------|------|-------|-----------------------------|--|--|---------------|------------|
| 21 | 2064.35 | 75.4 | vdda! | Analogue power              |  |  | AVDD3ALLP140  | Power      |
| 22 | 2164.35 | 75.4 | vdda! | Analogue power              |  |  | AVDD3ALLP140  | Power      |
| 23 | 2264.35 | 75.4 | gnda! | analogue ground             |  |  | AGND3ALLP140  | Power      |
| 24 | 2364.35 | 75.4 | gnda! | analogue ground             |  |  | AGND3ALLP140  | Power      |
| 25 | 2464.35 | 75.4 | v_clp | Clamping voltage for pixels |  |  | DirectPad_140 | Direct pad |
| 26 | 2564.35 | 75.4 | v_clp | Clamping voltage for pixels |  |  | DirectPad_140 | Direct pad |
| 27 | 2664.35 | 75.4 | vdda! | Analogue power              |  |  | AVDD3ALLP140  | Power      |
| 28 | 2764.35 | 75.4 | vdda! | Analogue power              |  |  | AVDD3ALLP140  | Power      |
| 29 | 2864.35 | 75.4 | vdda! | Analogue power              |  |  | AVDD3ALLP140  | Power      |
| 30 | 2964.35 | 75.4 | gnda! | analogue ground             |  |  | AGND3ALLP140  | Power      |

|    |         |      |            |                 |  |  |              |       |
|----|---------|------|------------|-----------------|--|--|--------------|-------|
| 31 | 3064.35 | 75.4 | gnda!      | analogue ground |  |  | AGND3ALLP140 | Power |
| 32 | 3164.35 | 75.4 | gnda!      | analogue ground |  |  | AGND3ALLP140 | Power |
| 33 | 3264.35 | 75.4 | gnda!      | analogue ground |  |  | AGND3ALLP140 | Power |
| 34 | 3389.35 | 75.4 | gnd_latch! | latch ground    |  |  | AGND3ALLP140 | Power |
| 35 | 3489.35 | 75.4 | gnd_latch! | latch ground    |  |  | AGND3ALLP140 | Power |
| 36 | 3589.35 | 75.4 | vdd_latch! | Digital power   |  |  | AVDD3ALLP140 | Power |
| 37 | 3689.35 | 75.4 | vdd_latch! | Digital power   |  |  | AVDD3ALLP140 | Power |
| 38 | 3814.35 | 75.4 | vdd!       | Digital power   |  |  | VDD3ALLP140  | Power |
| 39 | 3913.85 | 75.4 | vdd!       | Digital power   |  |  | VDD3ALLP140  | Power |
| 40 | 4013.85 | 75.4 | gnd!       | ground          |  |  | GND3ALLP140  | Power |

| Pad | x       | y    | Name       | Description                      |                             |  | Cell          | Type  |
|-----|---------|------|------------|----------------------------------|-----------------------------|--|---------------|-------|
| 41  | 4114.35 | 75.4 | gnd!       | ground                           |                             |  | GND3ALLP140   | Power |
| 42  | 4239.35 | 75.4 | vddra_reg! | output voltage of VDDA regulator | Regulator<br><br>(optional) |  | DirectPad_140 | Power |
| 43  | 4339.35 | 75.4 | vddra_reg! | output voltage of VDDA regulator |                             |  | DirectPad_140 | Power |
| 44  | 4439.35 | 75.4 | vddra_reg! | output voltage of VDDA regulator |                             |  | DirectPad_140 | Power |
| 45  | 4539.35 | 75.4 | vddra_reg! | output voltage of VDDA regulator |                             |  | DirectPad_140 | Power |
| 46  | 4664.35 | 75.4 | en_bandgap | enable band gap                  |                             |  | ICDP140       |       |
| 47  | 4764.35 | 75.4 | dis_vdda1  | disable the regulator            |                             |  | ICDP140       |       |
| 48  | 4864.35 | 75.4 | vddregin!  | input digital power              |                             |  | VDD3ALLP140   | Power |
| 49  | 4964.35 | 75.4 | vddregin!  | input digital power              |                             |  | VDD3ALLP140   | Power |
| 50  | 5064.35 | 75.4 | vddregin!  | input digital power              |                             |  | VDD3ALLP140   | Power |

|    |         |      |               |  |                             |  |               |       |
|----|---------|------|---------------|--|-----------------------------|--|---------------|-------|
| 51 | 5164.35 | 75.4 | vddregin!     | input digital power                    | Regulator<br><br>(optional) |  | VDD3ALLP140   | Power |
| 52 | 5264.35 | 75.4 | gnd!          | digital ground                         |                             |  | GND3ALLP140   | Power |
| 53 | 5364.35 | 75.4 | VBG           | bandgap voltage, test pad              |                             |  | DirectPad_140 |       |
| 54 | 5464.35 | 75.4 | VB_REG        | voltage of reference current, test pad |                             |  | DirectPad_140 |       |
| 55 | 5589.35 | 75.4 | gnd!          | ground                                 |                             |  | GND3ALLP140   | Power |
| 56 | 5689.35 | 75.4 | ext_pwrpulse  | external power pulse enable            |                             |  | ICDP140       |       |
| 57 | 5789.35 | 75.4 | vdd!          | digital power                          |                             |  | VDD3ALLP140   | Power |
| 58 | 5889.35 | 75.4 | vdd!          |  |                             |  | VDD3ALLP140   | Power |
| 59 | 5989.35 | 75.4 | ext_disc_line | external line discriminator            |                             |  | ICDP140       |       |
| 60 | 6089.35 | 75.4 | gnd!          | digital ground                         |                             |  | GND3ALLP140   | Power |

|    |         |      |               |   |        |   |                 |              |
|----|---------|------|---------------|---|--------|---|-----------------|--------------|
| 61 | 6189.35 | 75.4 | gnd!          | ground                                      |        |   | GND3ALLP140     | Power        |
| 62 | 6289.35 | 75.4 | speak_p_probe |   |        |   | ProbePadL140    |              |
| 63 | 6389.35 | 75.4 | speak_p       |   |        | I | PAD_LVDS_Rcv140 |              |
| 64 | 6489.35 | 75.4 | speak_n       | Active readout marker and clock for analog. | Main   | I | PAD_LVDS_Rcv140 |              |
| 65 | 6589.35 | 75.4 | speak_n_probe |   |        |   | ProbePadL140    |              |
| 66 | 6689.35 | 75.4 | vdd!          | digital power                               |        |   | VDD3ALLP140     | Power        |
| 67 | 6789.35 | 75.4 | vdd!          | digital power                               | Inputs |   | VDD3ALLP140     | Power        |
| 68 | 6889.35 | 75.4 | gnd_probe!    | ground                                      |        |   | GND3ALLP140     | Power        |
| 69 | 6989.35 | 75.4 | gnd!          | ground                                      |        |   | GND3ALLP140     | Power        |
| 70 | 7089.35 | 75.4 | start_p_probe |   |        |   | ProbePadL140    |              |
|    |         |      |               |   |        |   |                 |              |
| 71 | 7189.35 | 75.4 | start_p       | Synchronize the outputs                     |        | I | PAD_LVDS_Rcv140 | DI- pulldown |
| 72 | 7289.35 | 75.4 | start_n       |   |        | I | PAD_LVDS_Rcv140 | DI- pulldown |
| 73 | 7389.35 | 75.4 | start_n_probe |   |        |   | ProbePadL140    |              |
| 74 | 7489.35 | 75.4 | vdd!          | digital power                               |        |   | VDD3ALLP140     | Power        |
| 75 | 7589.35 | 75.4 | vdd_probe!    | digital power                               |        |   | VDD3ALLP140     | Power        |
| 76 | 7689.35 | 75.4 | gnd!          | ground                                      |        |   | GND3ALLP140     | Power        |
| 77 | 7789.35 | 75.4 | gnd!          | ground                                      |        |   | GND3ALLP140     | Power        |
| 78 | 7889.35 | 75.4 | clk_l_p_probe |   |        |   | ProbePadL140    |              |
| 79 | 7989.35 | 75.4 | clk_l_p       | Master clock, LVDS compatible               |        | I | PAD_LVDS_Rcv140 | LVDS-RX      |

| Pad | x        | y    | Name          | Description                    |         |   | Cell            | Type    |
|-----|----------|------|---------------|--------------------------------|---------|---|-----------------|---------|
| 80  | 8089.35  | 75.4 | clk_l_n       | Master clock, LVDS compatible  |         | I | PAD_LVDS_Rcv140 | LVDS-RX |
| 81  | 8189.35  | 75.4 | clk_l_n_probe |                                |         |   | ProbePadL140    |         |
| 82  | 8289.35  | 75.4 | vdd!          | digital power                  |         |   | VDD3ALLP140     | Power   |
| 83  | 8389.35  | 75.4 | vdd!          | digital power                  |         |   | VDD3ALLP140     | Power   |
| 84  | 8489.35  | 75.4 | gnd!          | ground                         |         |   | GND3ALLP140     | Power   |
| 85  | 8589.35  | 75.4 | gnd!          | ground                         |         |   | GND3ALLP140     | Power   |
| 86  | 8689.35  | 75.4 | clk_d_n_probe |                                |         |   | ProbePadL140    |         |
| 87  | 8789.35  | 75.4 | clk_d_n       | Readout clock for digital data | digital | O | LVDS-TX         | DO LVDS |
| 88  | 8889.35  | 75.4 | clk_d_p       |                                |         | O | LVDS-TX         | DO LVDS |
| 89  | 8989.35  | 75.4 | clk_d_p_probe |                                | main    |   | ProbePadL140    |         |
| 90  | 9089.35  | 75.4 | vdd!          | digital power                  |         |   | VDD3ALLP140     | Power   |
|     |          |      |               |                                | output  |   |                 |         |
| 91  | 9189.35  | 75.4 | do0_n_probe   |                                |         |   | ProbePadL140    |         |
| 92  | 9289.35  | 75.4 | do0_n         | Data output, channel 0         |         | O | LVDS-TX         | DO LVDS |
| 93  | 9389.35  | 75.4 | do0_p         |                                |         | O | LVDS-TX         | DO LVDS |
| 94  | 9489.35  | 75.4 | do0_p_probe   |                                |         |   | ProbePadL140    |         |
| 95  | 9589.35  | 75.4 | ground        | ground                         |         |   | GND3ALLP140     | Power   |
| 96  | 9689.35  | 75.4 | do1_n_probe   |                                |         |   | ProbePadL140    |         |
| 97  | 9789.35  | 75.4 | do1_n         | Data output, channel 1         |         | O | LVDS-TX         | DO LVDS |
| 98  | 9889.35  | 75.4 | do1_p         |                                |         | O | LVDS-TX         | DO LVDS |
| 99  | 9989.35  | 75.4 | do1_p_probe   |                                |         |   | ProbePadL140    |         |
| 100 | 10089.35 | 75.4 | vdd!          | digital power                  |         |   | VDD3ALLP140     | Power   |

|     |          |      |             |                         |  |   |              |         |
|-----|----------|------|-------------|-------------------------|--|---|--------------|---------|
| 101 | 10189.35 | 75.4 | mkd_n_probe |                         |  |   | ProbePadL140 |         |
| 102 | 10289.35 | 75.4 | mkd_n       | Marker for digital data |  | O | LVDS-TX      | DO LVDS |
| 103 | 10389.35 | 75.4 | mkd_p       |                         |  | O | LVDS-TX      | DO LVDS |
| 104 | 10489.35 | 75.4 | mkd_p_probe |                         |  |   | ProbePadL140 |         |
| 105 | 10589.35 | 75.4 | gnd!        | ground                  |  |   | GND3ALLP140  | Power   |
| 106 | 10689.35 | 75.4 | gnd!        | ground                  |  |   | GND3ALLP140  | Power   |
| 107 | 10789.35 | 75.4 | vdd!        | digital power           |  |   | VDD3ALLP140  | Power   |
| 108 | 10889.35 | 75.4 | vdd!        | digital power           |  |   | VDD3ALLP140  | Power   |
| 109 | 11014.35 | 75.4 | gnd!        | ground Memory           |  |   | GND3ALLP140  | Power   |
| 110 | 11114.35 | 75.4 | gnd!        | ground Memory           |  |   | GND3ALLP140  | Power   |

|     |          |      |       |                      |  |  |              |       |
|-----|----------|------|-------|----------------------|--|--|--------------|-------|
| 111 | 11214.35 | 75.4 | gnd!  | ground Memory        |  |  | GND3ALLP140  | Power |
| 112 | 11314.35 | 75.4 | vdd!  | digital power Memory |  |  | VDD3ALLP140  | Power |
| 113 | 11414.35 | 75.4 | vdd!  | digital power Memory |  |  | VDD3ALLP140  | Power |
| 114 | 11514.35 | 75.4 | vdd!  | digital power Memory |  |  | VDD3ALLP140  | Power |
| 115 | 11639.35 | 75.4 | gnda! | analogue ground      |  |  | AGND3ALLP140 | Power |
| 116 | 11739.35 | 75.4 | gnda! | analogue ground      |  |  | AGND3ALLP140 | Power |
| 117 | 11839.35 | 75.4 | gnda! | analogue ground      |  |  | AGND3ALLP140 | Power |
| 118 | 11939.35 | 75.4 | vdda! | Analogue power       |  |  | AVDD3ALLP140 | Power |
| 119 | 12039.35 | 75.4 | vdda! | Analogue power       |  |  | AVDD3ALLP140 | Power |
| 120 | 12139.35 | 75.4 | vdda! | Analogue power       |  |  | AVDD3ALLP140 | Power |

| Pad | x        | y    | Name | Description |  |  | Cell        | Type  |
|-----|----------|------|------|-------------|--|--|-------------|-------|
| 121 | 12264.35 | 75.4 | gnd! | ground      |  |  | GND3ALLP140 | Power |

|     |          |      |            |                                 |  |   |              |               |
|-----|----------|------|------------|---------------------------------|--|---|--------------|---------------|
| 122 | 12364.35 | 75.4 | clka       | Readout clock for analogue data |  | O | BT4P140      | 3-state, 4 mA |
| 123 | 12464.35 | 75.4 | clka_probe |                                 |  |   | ProbePadL140 |               |
| 124 | 12564.35 | 75.4 | vdd!       | digital power                   |  |   | VDD3ALLP140  | Power         |
| 125 | 12664.35 | 75.4 | mka        | Analog marker                   |  | O | BT4P140      |               |
| 126 | 12764.35 | 75.4 | mka_probe  |                                 |  |   | ProbePadL140 |               |
| 127 | 12864.35 | 75.4 | gnd!       | ground                          |  |   | GND3ALLP140  | Power         |
| 128 | 12964.35 | 75.4 | vdd!       | digital power                   |  |   | VDD3ALLP140  | Power         |
| 129 | 13064.35 | 75.4 | vdd!       | digital power                   |  |   | VDD3ALLP140  | Power         |
| 130 | 13164.35 | 75.4 | vdd!       | digital power                   |  |   | VDD3ALLP140  | Power         |

|     |          |      |           |                  |  |   |              |               |
|-----|----------|------|-----------|------------------|--|---|--------------|---------------|
| 131 | 13264.35 | 75.4 | vdd!      | digital power    |  |   | VDD3ALLP140  | Power         |
| 132 | 13364.35 | 75.4 | gnd!      | ground           |  |   | GND3ALLP140  | Power         |
| 133 | 13464.35 | 75.4 | gnd!      | ground           |  |   | GND3ALLP140  | Power         |
| 134 | 13564.35 | 75.4 | tdo       | JTAG data output |  | O | BT4P140      | 3-state, 4 mA |
| 135 | 13664.35 | 75.4 | tdo_probe |                  |  |   | ProbePadL140 |               |
| 136 | 13764.35 | 75.4 | tdi       | JTAG data input  |  | I | ICUP 140     | pullup        |
| 137 | 13864.35 | 75.4 | tdi_probe |                  |  |   | ProbePadL140 |               |
| 138 | 13964.35 | 75.4 | tms       | JTAG mode state  |  | I | ICUP 140     | pullup        |
| 139 | 14064.35 | 75.4 | tms_probe |                  |  |   | ProbePadL140 |               |
| 140 | 14164.35 | 75.4 | tck       | JTAG clock       |  | I | ICCK2P140    | clockin       |

|     |          |      |            |                                |  |   |              |                 |
|-----|----------|------|------------|--------------------------------|--|---|--------------|-----------------|
| 141 | 14264.35 | 75.4 | tck_probe  |                                |  |   | ProbePadL140 |                 |
| 142 | 14364.35 | 75.4 | vdd!       | digital power                  |  |   | VDD3ALLP140  | Power           |
| 143 | 14464.35 | 75.4 | vdd_probe! | digital power                  |  |   | VDD3ALLP140  | Power           |
| 144 | 14564.35 | 75.4 | rstb       | Asynchronous reset, active low |  | I | ISUP140      | pullup, schmitt |
| 145 | 14664.35 | 75.4 | rstb_probe |                                |  |   | ProbePadL140 |                 |
| 146 | 14764.35 | 75.4 | gnd!       | ground                         |  |   | GND3ALLP140  | Power           |
| 147 | 14864.35 | 75.4 | gnd!       | ground                         |  |   | GND3ALLP140  | Power           |
| 148 | 14964.35 | 75.4 | gnd!       | ground                         |  |   | GND3ALLP140  | Power           |
| 149 | 15064.35 | 75.4 | gnd!       | ground                         |  |   | GND3ALLP140  | Power           |
| 150 | 15164.35 | 75.4 | vdd!       | digital power                  |  |   | VDD3ALLP140  | Power           |

|     |          |      |            |               |  |   |              |       |
|-----|----------|------|------------|---------------|--|---|--------------|-------|
| 151 | 15264.35 | 75.4 | vdd!       | digital power |  |   | VDD3ALLP140  | Power |
| 152 | 15364.35 | 75.4 | clkc       | clock CMOS    |  | I | ICCK2P140    |       |
| 153 | 15464.35 | 75.4 | clkc_probe |               |  |   | ProbePadL140 |       |
| 154 | 15589.35 | 75.4 | vdd_latch! | digital power |  |   | AVDD3ALLP140 | Power |
| 155 | 15689.35 | 75.4 | vdd_latch! | digital power |  |   | AVDD3ALLP140 | Power |
| 156 | 15789.35 | 75.4 | gnd_latch! | ground        |  |   | AGND3ALLP140 | Power |
| 157 | 15889.35 | 75.4 | gnd_latch! | ground        |  |   | AGND3ALLP140 | Power |
| 158 | 16014.35 | 75.4 | gnd!       | ground Memory |  |   | GND3ALLP140  | Power |
| 159 | 16114.35 | 75.4 | gnd!       | ground Memory |  |   | GND3ALLP140  | Power |
| 160 | 16214.35 | 75.4 | gnd!       | ground Memory |  |   | GND3ALLP140  | Power |

| Pad | x        | y    | Name  | Description                 |  |  | Cell          | Type       |
|-----|----------|------|-------|-----------------------------|--|--|---------------|------------|
| 161 | 16314.35 | 75.4 | vdd!  | digital power Memory        |  |  | VDD3ALLP140   | Power      |
| 162 | 16414.35 | 75.4 | vdd!  | digital power Memory        |  |  | VDD3ALLP140   | Power      |
| 163 | 16514.35 | 75.4 | vdd!  | digital power Memory        |  |  |               | Power      |
| 164 | 16639.35 | 75.4 | gnda! | analogue ground             |  |  | AGND3ALLP140  | Power      |
| 165 | 16739.35 | 75.4 | gnda! | analogue ground             |  |  | AGND3ALLP140  | Power      |
| 166 | 16839.35 | 75.4 | gnda! | analogue ground             |  |  | AGND3ALLP140  | Power      |
| 167 | 16939.35 | 75.4 | gnda! | analogue ground             |  |  | AGND3ALLP140  | Power      |
| 168 | 17039.35 | 75.4 | gnda! | analogue ground             |  |  | AGND3ALLP140  | Power      |
| 169 | 17139.35 | 75.4 | v_clp | Clamping voltage for pixels |  |  | DIRECTPAD_140 | Direct pad |
| 170 | 17239.35 | 75.4 | v_clp | Clamping voltage for pixels |  |  | DIRECTPAD_140 | Direct pad |

|     |          |      |          |                                 |            |  |              |       |
|-----|----------|------|----------|---------------------------------|------------|--|--------------|-------|
| 171 | 17339.35 | 75.4 | vdda!    | Analogue power                  |            |  | AVDD3ALLP140 | Power |
| 172 | 17439.35 | 75.4 | vdda!    | Analogue power                  |            |  | AVDD3ALLP140 | Power |
| 173 | 17539.35 | 75.4 | vdda!    | Analogue power                  |            |  | AVDD3ALLP140 | Power |
| 174 | 17639.35 | 75.4 | vdda!    | Analogue power                  |            |  | AVDD3ALLP140 | Power |
| 175 | 17739.35 | 75.4 | vdda!    | Analogue power                  |            |  | AVDD3ALLP140 | Power |
| 176 | 17839.35 | 75.4 | vdda!    | Analogue power                  |            |  | AVDD3ALLP140 | Power |
| 177 | 17964.35 | 75.4 | vdda_reg | Ouput voltage of VDDA regulator | Regulator  |  | DirectPad140 |       |
| 178 | 18064.35 | 75.4 | vdda_reg |                                 | (optional) |  | DirectPad140 |       |
| 179 | 18164.35 | 75.4 | vdda_reg |                                 |            |  | DirectPad140 |       |
| 180 | 18264.35 | 75.4 | vdda_reg |                                 |            |  | DirectPad140 |       |

|     |          |      |           |                       |  |  |             |       |
|-----|----------|------|-----------|-----------------------|--|--|-------------|-------|
| 181 | 18389.35 | 75.4 | dis_vdda2 | disable the regulator |  |  | ICUP 140    |       |
| 182 | 18489.35 | 75.4 | gnd!      | ground                |  |  | GND3ALLP140 | Power |
| 183 | 18589.35 | 75.4 | vddregin! | input digital power   |  |  | VDD3ALLP140 |       |
| 184 | 18689.35 | 75.4 | vddregin! | input digital power   |  |  | VDD3ALLP140 |       |
| 185 | 18789.35 | 75.4 | vddregin! | input digital power   |  |  | VDD3ALLP140 |       |

|     |          |      |               |                     |     |   |             |       |
|-----|----------|------|---------------|---------------------|-----|---|-------------|-------|
| 186 | 18889.35 | 75.4 | vddregin!     | input digital power |     |   | VDD3ALLP140 |       |
| 187 | 19014.35 | 75.4 | vdd!          | PLL digital power   |     | I | VDD3ALLP140 | Power |
| 188 | 19114.35 | 75.4 | dis_vcopll    | disable pll vco     | PLL | I | ICDP 140    |       |
| 189 | 19214.35 | 75.4 | seloutpll_tst | select pll output   |     | I | ISUP 140    |       |
| 190 | 19314.35 | 75.4 | gnd!          | PLL digital ground  |     |   | GND3ALLP140 | Power |

|     |  |  |            |                               |     |   |                         |          |
|-----|--|--|------------|-------------------------------|-----|---|-------------------------|----------|
| 191 |  |  | LVDS_gnd   | LVDS ground supply            |     |   | AGND3ALLP140            | Power    |
| 192 |  |  | clk_pll_n  | pll clock                     |     | O | pad_lvds_transmitter140 | g_pad140 |
| 193 |  |  | clk_pll_p  | pll clock                     |     | O |                         | g_pad140 |
| 194 |  |  | LVDS_vdd   | LVDS power supply             | PLL |   | AVDD3ALLP140            | Power    |
| 195 |  |  | gnd        | PLL analogue ground           |     |   | AGND3ALLP140            | Power    |
| 196 |  |  | i_test_pll | pll test voltage, test pad    |     |   | APRIOP140               |          |
| 197 |  |  | vctl_pll   | pll voltage control, test pad |     |   | APRIOP140               |          |
| 198 |  |  | vdda       | PLL Analogue power            |     |   | AVDD3ALLP140            | Power    |

|     |         |  |                |                            |          |   |          |       |
|-----|---------|--|----------------|----------------------------|----------|---|----------|-------|
| 200 |         |  | gnd!           | analogue ground            |          |   | g_pad140 | power |
| 201 |         |  | vdda_test      | analogue test power        | For      |   | g_pad140 |       |
| 202 |         |  | anadriver_out0 | analogue driver test out 0 |          | O | g_pad140 |       |
| 203 | top     |  | anadriver_out1 | analogue driver test out 1 | analogue | O | g_pad140 |       |
| 204 |         |  | anadriver_out2 | analogue driver test out 2 |          | O | g_pad140 |       |
| 205 | of the  |  | anadriver_out3 | analogue driver test out 3 | test     | O | g_pad140 |       |
| 206 |         |  | anadriver_out4 | analogue driver test out 4 |          | O | g_pad140 |       |
| 207 | circuit |  | anadriver_out5 | analogue driver test out 5 |          | O | g_pad140 |       |
| 208 |         |  | anadriver_out6 | analogue driver test out 6 |          | O | g_pad140 |       |
| 209 |         |  | anadriver_out7 | analogue driver test out 7 |          | O | g_pad140 |       |