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Samsung Electronics Co.
-- KS32C50100 BSDL
--
-- Version 1.1 01-27-99
-- Revision List:
--      1) Pin name NC changed to LITTLE
--      2) 1194 -> 1149
-- Package Type: QFP2828B
--

entity KS32C50100 is

generic (PHYSICAL_PIN_MAP : string := "QFP2828B");

port (

                nUADTR1             :   inbit;
                UATXD1              :   outbit;
                nUADSR1             :   outbit;

                nDTRA               :   outbit;
                RXDA                :   inbit;
                nRTSA               :   outbit;
                TXDA                :   outbit;
                nCTSA               :   inbit;
                nDCDA               :   inbit;
                RXCA                :   inbit;
                nSYNCA              :   outbit;
                TXCA                :   inoutbit;
                nDTRB               :   outbit;
                RXDB                :   inbit;
                nRTSB               :   outbit;
                TXDB                :   outbit;
                nCTSB               :   inbit;
                nDCDB               :   inbit;
                RXCB                :   inbit;
                nSYNCB              :   outbit;
                TXCB                :   inoutbit;

                CRS_CRS_10M:            inbit;

                RX_DV_LINK10:           inbit;
                RXD                 :   inbit_vector(0 to 3);
                RX_ERR              :   inbit;
                RX_CLK_RXCLK_10M:   in  bit;

                COL_COL_10M:            inbit;
                TXD                 :   outbit_vector(0 to 3);
                TX_ERR_PCOMP_10M:   outbit;
                TX_CLK_TXCLK_10M:   in  bit;
                TX_EN_TXEN_10M:         outbit;
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MDIO        :  inoutbit;
LITTLE      :  inbit;
MDC         :  outbit;


TCK         :  inbit;
TMS         :  inbit;
TDI         :  inbit;
TDO         :  outbit;
nTRST       :  inbit;
TMODE       :  inbit;
UCLK        :  inbit;

nECS        :  outbit_vector(0 to 3);

nEWAIT      :  inbit;
nOE         :  outbit;
B0SIZE      :  inbit_vector(0 to 1);


CLKOEN      :  inbit;
MCLKO       :  outbit;
MCLK        :  inbit;
nRESET      :  inbit;
CLKSEL      :  inbit;

nRCS        :  outbit_vector(0 to 5);
nRAS        :  outbit_vector(0 to 3);
nCAS        :  outbit_vector(0 to 3);
nDWE        :  outbit;
nWBE        :  outbit_vector(0 to 3);

ExtMREQ     :  inbit;
ExtMACK     :  outbit;
ADDR        :  outbit_vector(0 to 21);

XDATA       :  inoutbit_vector(0 to 31);

P           :  inoutbit_vector(0 to 17);
SCL         :  inoutbit;
SDA         :  inoutbit;
UARXD0      :  inbit;
nUADTR0     :  inbit;
UATXD0      :  outbit;
nUADSR0     :  outbit;
UARXD1      :  inbit;
VDDP        :  linkagebit_vector(0 to 10);
VDDI        :  linkagebit_vector(0 to 10);
VSSP        :  linkagebit_vector(0 to 11);
VSSI        :  linkagebit_vector(0 to 10)

);
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use STD_1149_1_1149.all;

attribute PIN_MAP of KS32C50100 : entity is PHYSICAL_PIN_MAP;


-- QFP2828B Pin Map
--
-- No-connects: 49
--


constant QFP2828B : PIN_MAP_STRING :=



"nUADTR1 :   3, " &
"UATXD1  :   4, " &
"nUADSR1 :   5, " &

"nDTRA   :   6, " &
"RXDA    :   7, " &
"nRTSA   :   8, " &
"TXDA    :   9, " &
"nCTSA   :  10, " &
"nDCDA   :  13, " &
"RXCA    :  14, " &
"nSYNCA  :  15, " &
"TXCA    :  16, " &
"nDTRB   :  17, " &
"RXDB    :  18, " &
"nRTSB   :  19, " &
"TXDB    :  20, " &
"nCTSB   :  23, " &
"nDCDB   :  24, " &
"RXCB    :  25, " &
"nSYNCB  :  26, " &
"TXCB    :  27, " &

"CRS_CRS_10M :  28, " &

"RX_DV_LINK10 :  29, " &
"RXD :   (30, 33, 34, 35), " &
"RX_ERR :  36, " &
"RX_CLK_RXCLK_10M : 37, " &

"COL_COL_10M :  38, " &
"TXD :   (39, 40, 43, 44), " &
"TX_ERR_PCOMP_10M : 45, " &
"TX_CLK_TXCLK_10M : 46, " &
"TX_EN_TXEN_10M : 47, " &
"MDIO :   48, " &
"LITTLE :   49, " &
"MDC :   50, " &
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"TCK :   58, " &
"TMS :   59, " &
"TDI :   60, " &
"TDO :   61, " &
"nTRST :   62, " &
"TMODE :   63, " &
"UCLK :  64, " &

"nECS :   (67, 68, 69, 70), " &

"nEWAIT :  71, " &
"nOE :   72, " &
"B0SIZE :  (73, 74), " &


"CLKOEN :  76, " &
"MCLKO :   77, " &
"MCLK :   80, " &
"nRESET :  82, " &
"PCLKSEL :  83, " &

"nRCS :   (75, 84, 85, 86, 87, 88), " &
"nRAS :   (89, 90, 91, 94), " &
"nCAS :   (95, 96, 97, 98), " &
"nDWE :   99, " &
"nWBE :   (100, 101, 102, 107), " &

"ExtMREQ :  108, " &
"ExtMACK :  109, " &
--       A0  A1  A2  A3  A4  A5  A6  A7  A8  A9  A10 A11 A12 A13 A14 A15 A16 A17 A18 A19 A20 A21
"ADDR :   (110, 111, 112, 113, 114, 115, 116, 117, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 132, 133, 134,
135), " &

--       D0  D1  D2  D3  D4  D5  D6  D7  D8  D9  D10 D11 D12 D13 D14 D15 D16 D17 D18 D19 D20
D21 D22 D23 D24 D25 D26 D27 D28 D29 D30 D31
"XDATA :   (136, 137, 138, 139, 140, 141, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 159, 160,
161,162, 163, 164, 165, 166, 169, 170, 171, 172, 173, 174, 175), " &

--     P0  P1  P2  P3  P4  P5  P6  P7  P8  P9  P10 P11 P12 P13 P14 P15 P16 P17
"P :   (176, 179, 180, 181, 182, 183, 184, 185, 186, 189, 190, 191, 192, 193, 194, 195, 196, 199), " &
"SCL :   200, " &
"SDA :   201, " &
"UARXD0 :  202, " &
"nUADTR0 :  203, " &
"UATXD0 :  204, " &
"nUADSR0 :  205, " &
"UARXD1 :  206, " &
"VDDP :   1, 21, 41, 53, 78, 103, 118, 142, 157, 177, 197, " &
"VDDI :   11, 31, 51, 65, 92, 105, 130, 155, 167, 187, 207, " &
"VSSP :   2, 22, 42, 54, 79, 93, 106, 131, 156, 168, 188, 208, " &
"VSSI :   12, 32, 52, 66, 81, 104, 119, 143, 158, 178, 198 ";
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attribute TAP_SCAN_IN of TDI : signal is true;
attribute TAP_SCAN_OUT of TDO : signal is true;

attribute TAP_SCAN_MODE of TMS : signal is true;

attribute TAP_SCAN_RESET of nTRST : signal is true;

attribute TAP_SCAN_CLOCK of TCK : signal is true;

attribute INSTRUCTION_LENGTH of KS32C50100 : entity is 4;

attribute INSTRUCTION_OPCODE of KS32C50100 : entity is
                                "EXTEST (0000)," &
                                "SCAN_N (0010)," &
                                "INTEST (1100)," &
                                "IDCODE (1110)," &
                                "BYPASS (1111)," &
                                "CLAMP (0101)," &
                                "HIGHZ (0111)," &
                                "CLAMPZ (1001)," &
                                "SAMPLE (0011)," &
                                "RESTART (0100)";


-- KS32C50100's IDCODE is the ARM7TDMI's IDCODE.
attribute REGISTER_ACCESS of KS32C50100 : entity is
                                "0001" &        -- version
                                "111100" &     -- design center
                                "0011110000" &-- sequence number
                                "11110000111" &-- Samsung
                                "1";                                -- required by 1149.1


attribute REGISTER_ACCESS of KS32C50100 : entity is
                                "IDCODE (IDCODE)," &
                                "BOUNDARY (INTEST, SAMPLE, EXTEST)," &
                                "BYPASS (CLAMP, HIGHZ, BYPASS)";

attribute BOUNDARY_CELLS of KS32C50100 : entity is "BC_4, BC_2, BC_1";

attribute BOUNDARY_LENGTH of KS32C50100 : entity is 233;


attribute BOUNDARY_REGISTER of KS32C50100 : entity is

-- num    cell  port             function  safe [ccell disval rslt]

  "0   ( BC_2, UARXD1,          input,    X) ," &
  "1   ( BC_1, nUADSR0,         output2,  X) ," &
  "2   ( BC_1, UATXD0,          output2,  X) ," &
  "3   ( BC_2, nUADTR0,         input,    X) ," &
  "4   ( BC_2, UARXD0,          input,    X) ," &
  "5   ( BC_1, SDA,             output3,  1,    5, 1, Z) ," & -- Open-drain Output
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"6   ( BC_2, SDA,          input,    X) ," &
"7   ( BC_1, SCL,          output3,  1,    7, 1, Z) ," & -- Open-drain Output
"8   ( BC_2, SCL,          input,    X) ," &

"9   ( BC_1, *,           controlr, 1) ," & --P_ENB(17)
"10  ( BC_1, P(17),         output3,  X,    9, 1, Z) ," &
"11  ( BC_2, P(17),         input,    X) ," &

"12  ( BC_1, *,           controlr, 1) ," & --P_ENB(16)
"13  ( BC_1, P(16),         output3,  X,    12, 1, Z) ," &
"14  ( BC_2, P(16),         input,    X) ," &

"15  ( BC_1, *,           controlr, 1) ," & --P_ENB(15)
"16  ( BC_1, P(15),         output3,  X,    15, 1, Z) ," &
"17  ( BC_2, P(15),         input,    X) ," &

"18  ( BC_1, *,           controlr, 1) ," & --P_ENB(14)
"19  ( BC_1, P(14),         output3,  X,    18, 1, Z) ," &
"20  ( BC_2, P(14),         input,    X) ," &

"21  ( BC_1, *,           controlr, 1) ," & --P_ENB(13)
"22  ( BC_1, P(13),         output3,  X,    21, 1, Z) ," &
"23  ( BC_2, P(13),         input,    X) ," &

"24  ( BC_1, *,           controlr, 1) ," & --P_ENB(12)
"25  ( BC_1, P(12),         output3,  X,    24, 1, Z) ," &
"26  ( BC_2, P(12),         input,    X) ," &

"27  ( BC_1, *,           controlr, 1) ," & --P_ENB(11)
"28  ( BC_1, P(11),         output3,  X,    27, 1, Z) ," &
"29  ( BC_2, P(11),         input,    X) ," &

"30  ( BC_1, *,           controlr, 1) ," & --P_ENB(10)
"31  ( BC_1, P(10),         output3,  X,    30, 1, Z) ," &
"32  ( BC_2, P(10),         input,    X) ," &
"33  ( BC_1, *,           controlr, 1) ," & --P_ENB(9)
"34  ( BC_1, P(9),          output3,  X,    33, 1, Z) ," &
"35  ( BC_2, P(9),          input,    X) ," &

"36  ( BC_1, *,           controlr, 1) ," & --P_ENB(8)
"37  ( BC_1, P(8),          output3,  X,    36, 1, Z) ," &
"38  ( BC_2, P(8),          input,    X) ," &

"39  ( BC_1, *,           controlr, 1) ," & --P_ENB(7)
"40  ( BC_1, P(7),          output3,  X,    39, 1, Z) ," &
"41  ( BC_2, P(7),          input,    X) ," &

"42  ( BC_1, *,           controlr, 1) ," & --P_ENB(6)
"43  ( BC_1, P(6),          output3,  X,    42, 1, Z) ," &
"44  ( BC_2, P(6),          input,    X) ," &

"45  ( BC_1, *,           controlr, 1) ," & --P_ENB(5)
"46  ( BC_1, P(5),          output3,  X,    45, 1, Z) ," &
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"47  ( BC_2, P(5),          input,    X) ," &

"48  ( BC_1, *,             controlr, 1) ," & --P_ENB(4)
"49  ( BC_1, P(4),          output3,  X,    48, 1, Z) ," &
"50  ( BC_2, P(4),          input,    X) ," &

"51  ( BC_1, *,             controlr, 1) ," & --P_ENB(3)
"52  ( BC_1, P(3),          output3,  X,    51, 1, Z) ," &
"53  ( BC_2, P(3),          input,    X) ," &

"54  ( BC_1, *,             controlr, 1) ," & --P_ENB(2)
"55  ( BC_1, P(2),          output3,  X,    54, 1, Z) ," &
"56  ( BC_2, P(2),          input,    X) ," &

"57  ( BC_1, *,             controlr, 1) ," & --P_ENB(1)
"58  ( BC_1, P(1),          output3,  X,    57, 1, Z) ," &
"59  ( BC_2, P(1),          input,    X) ," &

"60  ( BC_1, *,             controlr, 1) ," & --P_ENB(0)
"61  ( BC_1, P(0),          output3,  X,    60, 1, Z) ," &
"62  ( BC_2, P(0),          input,    X) ," &

"63  ( BC_1, XDATA(31),     output3,  X,    127, 1, Z) ," &
"64  ( BC_2, XDATA(31),     input,    X) ," &

"65  ( BC_1, XDATA(30),     output3,  X,    127, 1, Z) ," &
"66  ( BC_2, XDATA(30),     input,    X) ," &

"67  ( BC_1, XDATA(29),     output3,  X,    127, 1, Z) ," &
"68  ( BC_2, XDATA(29),     input,    X) ," &

"69  ( BC_1, XDATA(28),     output3,  X,    127, 1, Z) ," &
"70  ( BC_2, XDATA(28),     input,    X) ," &
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"71  ( BC_1, XDATA(27),      output3,  X,    127, 1, Z) ," &
"72  ( BC_2, XDATA(27),      input,    X) ," &

"73  ( BC_1, XDATA(26),      output3,  X,    127, 1, Z) ," &
"74  ( BC_2, XDATA(26),      input,    X) ," &

"75  ( BC_1, XDATA(25),      output3,  X,    127, 1, Z) ," &
"76  ( BC_2, XDATA(25),      input,    X) ," &

"77  ( BC_1, XDATA(24),      output3,  X,    127, 1, Z) ," &
"78  ( BC_2, XDATA(24),      input,    X) ," &

"79  ( BC_1, XDATA(23),      output3,  X,    127, 1, Z) ," &
"80  ( BC_2, XDATA(23),      input,    X) ," &

"81  ( BC_1, XDATA(22),      output3,  X,    127, 1, Z) ," &
"82  ( BC_2, XDATA(22),      input,    X) ," &

"83  ( BC_1, XDATA(21),      output3,  X,    127, 1, Z) ," &
"84  ( BC_2, XDATA(21),      input,    X) ," &

"85  ( BC_1, XDATA(20),      output3,  X,    127, 1, Z) ," &
"86  ( BC_2, XDATA(20),      input,    X) ," &

"87  ( BC_1, XDATA(19),      output3,  X,    127, 1, Z) ," &
"88  ( BC_2, XDATA(19),      input,    X) ," &

"89  ( BC_1, XDATA(18),      output3,  X,    127, 1, Z) ," &
"90  ( BC_2, XDATA(18),      input,    X) ," &

"91  ( BC_1, XDATA(17),      output3,  X,    127, 1, Z) ," &
"92  ( BC_2, XDATA(17),      input,    X) ," &

"93  ( BC_1, XDATA(16),      output3,  X,    127, 1, Z) ," &
"94  ( BC_2, XDATA(16),      input,    X) ," &

"95  ( BC_1, XDATA(15),      output3,  X,    127, 1, Z) ," &
"96  ( BC_2, XDATA(15),      input,    X) ," &

"97  ( BC_1, XDATA(14),      output3,  X,    127, 1, Z) ," &
"98  ( BC_2, XDATA(14),      input,    X) ," &

"99  ( BC_1, XDATA(13),      output3,  X,    127, 1, Z) ," &
"100 ( BC_2, XDATA(13),       input,    X) ," &

"101 ( BC_1, XDATA(12),       output3,  X,    127, 1, Z) ," &
"102 ( BC_2, XDATA(12),       input,    X) ," &

"103 ( BC_1, XDATA(11),       output3,  X,    127, 1, Z) ," &
"104 ( BC_2, XDATA(11),       input,    X) ," &

"105 ( BC_1, XDATA(10),       output3,  X,    127, 1, Z) ," &
"106 ( BC_2, XDATA(10),       input,    X) ," &
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"107 ( BC_1, XDATA(9),       output3,  X,    127, 1, Z) ," &
"108 ( BC_2, XDATA(9),       input,    X) ," &

"109 ( BC_1, XDATA(8),       output3,  X,    127, 1, Z) ," &
"110 ( BC_2, XDATA(8),       input,    X) ," &

"111 ( BC_1, XDATA(7),       output3,  X,    127, 1, Z) ," &
"112 ( BC_2, XDATA(7),       input,    X) ," &

"113 ( BC_1, XDATA(6),       output3,  X,    127, 1, Z) ," &
"114 ( BC_2, XDATA(6),       input,    X) ," &

"115 ( BC_1, XDATA(5),       output3,  X,    127, 1, Z) ," &
"116 ( BC_2, XDATA(5),       input,    X) ," &

"117 ( BC_1, XDATA(4),       output3,  X,    127, 1, Z) ," &
"118 ( BC_2, XDATA(4),       input,    X) ," &

"119 ( BC_1, XDATA(3),       output3,  X,    127, 1, Z) ," &
"120 ( BC_2, XDATA(3),       input,    X) ," &

"121 ( BC_1, XDATA(2),       output3,  X,    127, 1, Z) ," &
"122 ( BC_2, XDATA(2),       input,    X) ," &

"123 ( BC_1, XDATA(1),       output3,  X,    127, 1, Z) ," &
"124 ( BC_2, XDATA(1),       input,    X) ," &

"125 ( BC_1, XDATA(0),       output3,  X,    127, 1, Z) ," &
"126 ( BC_2, XDATA(0),       input,    X) ," &

"127 ( BC_1, *,              controlr, 1) ," & --DATAOUT_ENB

"128 ( BC_1, ADDR(21),       output3,  X,    184, 1, Z) ," &
"129 ( BC_1, ADDR(20),       output3,  X,    184, 1, Z) ," &
"130 ( BC_1, ADDR(19),       output3,  X,    184, 1, Z) ," &
"131 ( BC_1, ADDR(18),       output3,  X,    184, 1, Z) ," &
"132 ( BC_1, ADDR(17),       output3,  X,    184, 1, Z) ," &
"133 ( BC_1, ADDR(16),       output3,  X,    184, 1, Z) ," &
"134 ( BC_1, ADDR(15),       output3,  X,    184, 1, Z) ," &
"135 ( BC_1, ADDR(14),       output3,  X,    184, 1, Z) ," &
"136 ( BC_1, ADDR(13),       output3,  X,    184, 1, Z) ," &
"137 ( BC_1, ADDR(12),       output3,  X,    184, 1, Z) ," &
"138 ( BC_1, ADDR(11),       output3,  X,    184, 1, Z) ," &
"139 ( BC_1, ADDR(10),       output3,  X,    184, 1, Z) ," &
"140 ( BC_1, ADDR(9),        output3,  X,    184, 1, Z) ," &
"141 ( BC_1, ADDR(8),        output3,  X,    184, 1, Z) ," &
"142 ( BC_1, ADDR(7),        output3,  X,    184, 1, Z) ," &
"143 ( BC_1, ADDR(6),        output3,  X,    184, 1, Z) ," &
"144 ( BC_1, ADDR(5),        output3,  X,    184, 1, Z) ," &
"145 ( BC_1, ADDR(4),        output3,  X,    184, 1, Z) ," &
"146 ( BC_1, ADDR(3),        output3,  X,    184, 1, Z) ," &
"147 ( BC_1, ADDR(2),        output3,  X,    184, 1, Z) ," &
"148 ( BC_1, ADDR(1),        output3,  X,    184, 1, Z) ," &
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"149 ( BC_1, ADDR(0),         output3,  X,    184, 1, Z) ," &

"150 ( BC_1, ExtMACK,         output2,  X) ," &
"151 ( BC_2, ExtMREQ,          input,    X) ," &

"152 ( BC_1, nWBE(3),         output3,  X,    184, 1, Z) ," &
"153 ( BC_1, nWBE(2),         output3,  X,    184, 1, Z) ," &
"154 ( BC_1, nWBE(1),         output3,  X,    184, 1, Z) ," &
"155 ( BC_1, nWBE(0),         output3,  X,    184, 1, Z) ," &

"156 ( BC_1, nDWE,            output3,  X,    184, 1, Z) ," &

"157 ( BC_1, nCAS(3),         output3,  X,    184, 1, Z) ," &
"158 ( BC_1, nCAS(2),         output3,  X,    184, 1, Z) ," &
"159 ( BC_1, nCAS(1),         output3,  X,    184, 1, Z) ," &
"160 ( BC_1, nCAS(0),         output3,  X,    184, 1, Z) ," &

"161 ( BC_1, nRAS(3),         output3,  X,    184, 1, Z) ," &
"162 ( BC_1, nRAS(2),         output3,  X,    184, 1, Z) ," &
"163 ( BC_1, nRAS(1),         output3,  X,    184, 1, Z) ," &
"164 ( BC_1, nRAS(0),         output3,  X,    184, 1, Z) ," &

"165 ( BC_1, nRCS(5),         output3,  X,    184, 1, Z) ," &
"166 ( BC_1, nRCS(4),         output3,  X,    184, 1, Z) ," &
"167 ( BC_1, nRCS(3),         output3,  X,    184, 1, Z) ," &
"168 ( BC_1, nRCS(2),         output3,  X,    184, 1, Z) ," &
"169 ( BC_1, nRCS(1),         output3,  X,    184, 1, Z) ," &

"170 ( BC_2, CLKSEL,           input,    X) ," &
"171 ( BC_2, nRESET,           input,    X) ," &
"172 ( BC_4, MCLK,            input,    X) ," &
"173 ( BC_1, MCLKO,           output2,  X) ," &
"174 ( BC_2, CLKOEN,           input,    X) ," &

"175 ( BC_1, nRCS(0),         output3,  X,    184, 1, Z) ," &

"176 ( BC_2, B0SIZE(1),        input,    X) ," &
"177 ( BC_2, B0SIZE(0),        input,    X) ," &

"178 ( BC_1, nOE,             output3,  X,    184, 1, Z) ," &

"179 ( BC_2, nEWAIT,           input,    X) ," &

"180 ( BC_1, nECS(3),         output3,  X,    184, 1, Z) ," &
"181 ( BC_1, nECS(2),         output3,  X,    184, 1, Z) ," &
"182 ( BC_1, nECS(1),         output3,  X,    184, 1, Z) ," &
"183 ( BC_1, nECS(0),         output3,  X,    184, 1, Z) ," &

"184 ( BC_1, *,               controlr, 1) ," & --DIS_BUS

"185 ( BC_2, UCLK,            input,    X) ," &
"186 ( BC_2, TMODE,           input,    X) ," &
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"187 ( BC_1, MDC,             output2,  X) ," &
"188 ( BC_2, LITTLE,          input,    X) ," &

"189 ( BC_1, *,               controlr, 1) ," & --MDIO_OE
"190 ( BC_1, MDIO,            output3,  X,    189, 1, Z) ," &
"191 ( BC_2, MDIO,            input,    X) ," &

"192 ( BC_1, TX_EN_TXEN_10M,   output2,  X) ," &
"193 ( BC_2, TX_CLK_TXCLK_10M, input,    X) ," &
"194 ( BC_1, TX_ERR_PCOMP_10M, output2,  X) ," &
"195 ( BC_1, TXD3,            output2,  X) ," &
"196 ( BC_1, TXD2,            output2,  X) ," &
"197 ( BC_1, TXD1_LOOP10,      output2,  X) ," &
"198 ( BC_1, TXD0_TXD_10M,     output2,  X) ," &
"199 ( BC_2, COL_COL_10M,      input,    X) ," &
"200 ( BC_2, RX_CLK_RXCLK_10M, input,    X) ," &
"201 ( BC_2, RX_ERR,           input,    X) ," &
"202 ( BC_2, RXD3,            input,    X) ," &
"203 ( BC_2, RXD2,            input,    X) ," &
"204 ( BC_2, RXD1,            input,    X) ," &
"205 ( BC_2, RXD0_RXD_10M,     input,    X) ," &
"206 ( BC_2, RX_DV_LINK10,     input,    X) ," &
"207 ( BC_2, CRS_CRS_10M,      input,    X) ," &

"208 ( BC_1, *,               controlr, 1) ," & --TXCBEN
"209 ( BC_1, TXCB,            output3,  X,    208, 1, Z) ," &
"210 ( BC_2, TXCB,            input,    X) ," &

"211 ( BC_1, nSYNCB,          output2,  X) ," &
"212 ( BC_2, RXCB,            input,    X) ," &
"213 ( BC_2, nDCDB,           input,    X) ," &
"214 ( BC_2, nCTSB,           input,    X) ," &
"215 ( BC_1, TXDB,            output2,  X) ," &
"216 ( BC_1, nRTSB,           output2,  X) ," &
"217 ( BC_2, RXDB,            input,    X) ," &
"218 ( BC_1, nDTRB,           output2,  X) ," &

"219 ( BC_1, *,               controlr, 1), " & --TXCAEN
"220 ( BC_1, TXCA,            output3,  X,    219, 1, Z) ," &
"221 ( BC_2, TXCA,            input,    X) ," &

"222 ( BC_1, nSYNCA,          output2,  X) ," &
"223 ( BC_2, RXCA,            input,    X) ," &
"224 ( BC_2, nDCDA,           input,    X) ," &
"225 ( BC_2, nCTSA,           input,    X) ," &
"226 ( BC_1, TXDA,            output2,  X) ," &
"227 ( BC_1, nRTSA,           output2,  X) ," &
"228 ( BC_2, RXDA,            input,    X) ," &
"229 ( BC_1, nDTRA,           output2,  X) ," &
"230 ( BC_1, nUADSR1,         output2,  X) ," &
"231 ( BC_1, UATXD1,          output2,  X) ," &
"232 ( BC_2, nUADTR1,         input,    X) ";
end KS32C50100;
```