```
% Hit Buffer - Tag RAM                          Revised:   January 21, 1999
% TagRam.Sch                                    Revision:
% Studio Associato Eclipse
% Via Pieroni, 36
% I-56023 Visignano (PI)
% tel 050 778060
%
BOARD = ORCAD.PCB;

PARTS
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                R107;   % 220
CSMPD           = C271,   % 22UF
                  C272,   % 22UF
                  C494;   % 22UF
PIN3            = JP2,   % 3 PIN MASCHIO
                  JP3,   % 3 PIN MASCHIO
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RARR9X10        = 10P1;   % 4.7K
RARR8X9         = 9P2,   % 4.7K
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CSMPB           = C305;   % 4.7UF 16V
RC0805          = R222,   % 470
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HC02D           = U91,   % 74ALS02D
                  U95;   % 74ALS02D
HC08D           = U82,   % 74ALS08D
                  U94,   % 74ALS08D
                  U97;   % 74ALS08D
ESDSTRIP        = STRP2;   % BOTTOM DISCHARGE STRIP
HC32D           = U14,   % CD74AC32M
                  U96;   % CD74AC32M
SOIC16          = U78,   % CD74HCT123M
                  U79,   % CD74HCT123M
                  U80,   % CD74HCT123M
                  U81,   % CD74HCT123M
                  U93;   % CD74HCT123M
VMECNXTD        = P1,   % CONN VME64-160P (Z+A+B+C+D)
                  P2,   % CONN VME64-160P (Z+A+B+C+D)
                  P3;   % CONN VME64-160P (Z+A+B+C+D)
VME5X19         = P0;   % CONN VME64-95P (A+B+C+D+E)
RC0805          = C13,   % CP
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ZDIP28W         = U73;   % CY27H512-45PC
SOL24           = UB71,   % CY74FCT543CTSOC
                  UA71,   % CY74FCT543CTSOC
                  UA72,   % CY74FCT543CTSOC
                  UB72;   % CY74FCT543CTSOC
PLCC32          = U64,   % CY7B992-7JC
                  U65,   % CY7B992-7JC
                  U66,   % CY7B992-7JC
                  U67;   % CY7B992-7JC
PLCC68          = U15,   % CY7C4245-10JC
                  U16,   % CY7C4245-10JC
                  U17,   % CY7C4245-10JC
                  U18;   % CY7C4245-10JC
26LS31D         = U13,   % DS90C031TM
                  U19,   % DS90C031TM
                  U20,   % DS90C031TM
                  U21,   % DS90C031TM
                  U22,   % DS90C031TM
                  U23,   % DS90C031TM
                  U24,   % DS90C031TM
                  U98;   % DS90C031TM
26LS32D         = U1,   % DS90C032TM
                  U2,   % DS90C032TM
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                  U25;   % DS90C032TM
ZR400           = F1,   % FUSE 10A
                  F2,   % FUSE 10A
                  F3;   % FUSE 10A
SOJ28           = U47,   % IDT71B74S08Y
                  U48,   % IDT71B74S08Y
                  U49,   % IDT71B74S08Y
                  U50,   % IDT71B74S08Y
                  U51,   % IDT71B74S08Y
                  U52,   % IDT71B74S08Y
                  U53,   % IDT71B74S08Y
                  U54;   % IDT71B74S08Y
KEL8830         = J1,   % KEL 8830E-052-170L
                  J2,   % KEL 8830E-052-170L
                  J3;   % KEL 8830E-052-170L
TSOJ32          = U31,   % KM68B1002AT-12
                  U32,   % KM68B1002AT-12
                  U33,   % KM68B1002AT-12
                  U34,   % KM68B1002AT-12
                  U39,   % KM68B1002AT-12
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                  U61,   % KM68B1002AT-12
                  U62,   % KM68B1002AT-12
                  U63,   % KM68B1002AT-12
                  U26,   % KM68B1002J-10
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                  U27,   % KM68B1002J-10
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                  U57,   % KM68B1002J-10
                  U58,   % KM68B1002J-10
                  U59,   % KM68B1002J-10
                  U60;   % KM68B1002J-10
LEDRECT         = D1,   % LED
                  D2,   % LED
                  D4,   % LED
                  D5,   % LED
                  D6,   % LED
                  D7;   % LED
DLED            = D3;   % LED DUAL
TLED            = D9;   % LED TRIPLE
ZOSC8E14        = U68;   % OSCILLATOR
PIN1            = PAD269,   % PIN1
                  PAD270;   % PIN1
RARR8X9         = 9P11,   % RD
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                  9P13,   % RD
                  9P14;   % RD
RC0805          = R90,   % RD
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                  R306,   % RP
                  R307,   % RP
                  R308,   % RP
                  R311,   % RP
                  R312,   % RP
                  R318,   % RP
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R319,   % RP
R320,   % RP
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R394,   % RP
R395,   % RP
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R397,   % RP
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R402,   % RP
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R448,   % RP
R453,   % RP
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R457,   % RP
R458,   % RP
R459,   % RP
R460,   % RP
R463,   % RP
R464,   % RP
R500,   % RP
R501,   % RP
R502,   % RP
R503,   % RP
R1,   % RS
R10,   % RS
R11,   % RS
R12,   % RS
R62,   % RS
R63,   % RS
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                  R64,   % RS
                  R65,   % RS
                  R66,   % RS
                  R67,   % RS
                  R91,   % RS
                  R96,   % RS
                  R275,   % RS
                  R309,   % RS
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                  R483,   % RS
                  R490,   % RS
                  R491;   % RS
RC1206          = R277,   % RT
                  R278,   % RT
                  R279,   % RT
                  R280,   % RT
                  R281,   % RT
                  R282,   % RT
                  R283,   % RT
                  R284,   % RT
                  R285,   % RT
                  R287,   % RT
                  R288,   % RT
                  R289,   % RT
                  R290,   % RT
                  R291,   % RT
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                  R293,   % RT
                  R294,   % RT
                  R295,   % RT
                  R296,   % RT
                  R297,   % RT
                  R298,   % RT
                  R299,   % RT
                  R300,   % RT
                  R301,   % RT
                  R302,   % RT
                  R304;   % RT
RARR5X6         = 6P5;   % RU
RC0805          = R71,   % RU
                  R72,   % RU
                  R73,   % RU
                  R74,   % RU
                  R75,   % RU
                  R76,   % RU
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                  R77,   % RU
                  R78,   % RU
                  R79,   % RU
                  R80,   % RU
                  R81,   % RU
                  R82,   % RU
                  R83,   % RU
                  R84,   % RU
                  R85,   % RU
                  R86,   % RU
                  R87,   % RU
                  R88,   % RU
                  R89,   % RU
                  R200,   % RU
                  R201,   % RU
                  R202,   % RU
                  R203,   % RU
                  R204,   % RU
                  R205,   % RU
                  R206,   % RU
                  R208,   % RU
                  R213,   % RU
                  R214,   % RU
                  R236,   % RU
                  R271,   % RU
                  R313,   % RU
                  R344,   % RU
                  R345,   % RU
                  R346,   % RU
                  R469,   % RU
                  R470,   % RU
                  R473;   % RU
SSOP48          = U84,   % SN74ABTE16245DL
                  U85,   % SN74ABTE16245DL
                  U87,   % SN74ABTE16245DL
                  U88,   % SN74ABTE16245DL
                  U89,   % SN74ABTE16245DL
                  U90,   % SN74ABTE16245DL
                  U86;   % SN74ABTE16246DL
DIPSW4          = S1;   % SW DIP-4
DIPSW5          = S2;   % SW DIP-5
SOIC8           = U83;   % TL7705ACD
ESDSTRIP        = STRP1;   % TOP DISCHARGE STRIP
TP              = TP1,   % TP
                  TP2,   % TP
                  TP3,   % TP
                  TP4,   % TP
                  TP5,   % TP
                  TP6,   % TP
                  TP7,   % TP
                  TP8,   % TP
                  TP9,   % TP
                  TP10,   % TP
                  TP11,   % TP
                  TP12,   % TP
                  TP13;   % TP
DIOPWB          = D8;   % TRANZORB
IND400          = L1,   % VK200
                  L2;   % VK200
PQ160SKN        = XU1,   % XC73144-PQ160
                  XU2,   % XC73144-PQ160
                  XU10,   % XC73144-PQ160
                  XU11,   % XC73144-PQ160
                  XU12;   % XC73144-PQ160
PLCC44          = XU3,   % XC7336-5PC44
                  XU4,   % XC7336-5PC44
                  XU5,   % XC7336-5PC44
                  XU6,   % XC7336-5PC44
```

```
                XU7,   % XC7336-5PC44
                XU8,   % XC7336-5PC44
                XU9,   % XC7336-5PC44
                XU13,   % XC7336-5PC44
                XU14,   % XC7336-5PC44
                XU15,   % XC7336-5PC44
                XU16,   % XC7336-5PC44
                XU17,   % XC7336-5PC44
                XU18;   % XC7336-5PC44

NETS

_9P2_7    = U47/11 9P2/7 ;
_9P4_3    = U48/11 9P4/3 ;
_9P7_7    = U49/11 9P7/7 ;
_9P8_3    = U50/11 9P8/3 ;
_9P4_6    = U47/12 9P4/6 ;
_9P2_2    = U48/12 9P2/2 ;
_9P8_6    = U49/12 9P8/6 ;
_9P7_2    = U50/12 9P7/2 ;
_9P2_6    = U47/13 9P2/6 ;
_9P4_2    = U48/13 9P4/2 ;
_9P7_6    = U49/13 9P7/6 ;
_9P8_2    = U50/13 9P8/2 ;
_9P2_9    = U47/15 9P2/9 ;
_9P2_4    = U48/15 9P2/4 ;
_9P7_9    = U49/15 9P7/9 ;
_9P7_4    = U50/15 9P7/4 ;
_9P4_9    = U47/16 9P4/9 ;
_9P4_4    = U48/16 9P4/4 ;
_9P8_9    = U49/16 9P8/9 ;
_9P8_4    = U50/16 9P8/4 ;
_9P4_8    = U47/17 9P4/8 ;
_9P2_3    = U48/17 9P2/3 ;
_9P8_8    = U49/17 9P8/8 ;
_9P7_3    = U50/17 9P7/3 ;
_9P2_8    = U47/18 9P2/8 ;
_9P4_5    = U48/18 9P4/5 ;
_9P7_8    = U49/18 9P7/8 ;
_9P8_5    = U50/18 9P8/5 ;
_9P4_7    = U47/19 9P4/7 ;
_9P2_5    = U48/19 9P2/5 ;
_9P8_7    = U49/19 9P8/7 ;
_9P7_5    = U50/19 9P7/5 ;
_9P5_7    = U51/11 9P5/7 ;
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_9P6_7    = U53/11 9P6/7 ;
_9P9_3    = U54/11 9P9/3 ;
_9P3_6    = U51/12 9P3/6 ;
_9P5_2    = U52/12 9P5/2 ;
_9P9_6    = U53/12 9P9/6 ;
_9P6_2    = U54/12 9P6/2 ;
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_9P5_3    = U52/17 9P5/3 ;
_9P9_8    = U53/17 9P9/8 ;
_9P6_3    = U54/17 9P6/3 ;
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_9P5_8    = U51/18 9P5/8 ;
_9P3_5    = U52/18 9P3/5 ;
_9P6_8    = U53/18 9P6/8 ;
_9P9_5    = U54/18 9P9/5 ;
_9P3_7    = U51/19 9P3/7 ;
_9P5_5    = U52/19 9P5/5 ;
_9P9_7    = U53/19 9P9/7 ;
_9P6_5    = U54/19 9P6/5 ;
_C306_2   = C306/2 R237/1 ;
_C307_2   = C307/2 R238/1 ;
_C308_2   = C308/2 R239/1 ;
_C309_2   = C309/2 R240/1 ;
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_C404_2   = R366/1 C404/2 ;
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_C407_2   = R369/1 C407/2 ;
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_C412_2   = R374/1 C412/2 ;
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_C418_2   = R380/1 C418/2 ;
_C419_2   = R381/1 C419/2 ;
_C420_2   = C420/2 R382/1 ;
_C421_2   = C421/2 R383/1 ;
_C422_2   = R384/1 C422/2 ;
_C423_2   = C423/2 R385/1 ;
_C424_2   = C424/2 R386/1 ;
_R97_1    = U28/11 R97/1 ;
_R98_1    = U29/11 R98/1 ;
_R99_1    = U30/11 R99/1 ;
_C330_2   = C330/2 R255/1 ;
_C331_2   = C331/2 R256/1 ;
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_C334_2   = C334/2 R259/1 ;
_C335_2   = C335/2 R260/1 ;
_C336_2   = C336/2 R261/1 ;
_C337_2   = C337/2 R262/1 ;
_C338_2   = C338/2 R263/1 ;
_C339_2   = C339/2 R264/1 ;
_C340_2   = C340/2 R265/1 ;
ODD1_6    = XU7/43 XU5/4 ;
_R91_1    = XU5/29 R91/1 ;
ODD0_6    = XU7/44 XU4/36 ;
ODD2_6    = XU7/7 XU6/36 ;
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ODD3_6    = XU7/20 XU8/36 ;
HRS23_11  = U61/11 U55/22 R109/1 ;
_C344_2   = C344/2 R267/1 ;
_C345_2   = C345/2 R268/1 ;
_R108_1   = U60/22 R108/1 ;
_C346_2   = C346/2 R269/1 ;
_C428_2   = C428/2 R390/1 ;
_C429_2   = C429/2 R391/1 ;
_C430_2   = C430/2 R392/1 ;
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_C466_2   = C466/2 R428/1 ;
_C467_2   = C467/2 R429/1 ;
_C468_2   = C468/2 R430/1 ;
_C469_2   = C469/2 R431/1 ;
_C470_2   = C470/2 R432/1 ;
_C471_2   = C471/2 R433/1 ;
_C472_2   = C472/2 R434/1 ;
_C473_2   = C473/2 R435/1 ;
_C474_2   = C474/2 R436/1 ;
_C475_2   = C475/2 R437/1 ;
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_C462_2   = C462/2 R424/1 ;
_C463_2   = C463/2 R425/1 ;
_C464_2   = C464/2 R426/1 ;
_R487_1   = XU10/133 R487/1 ;
_R486_1   = XU10/145 R486/1 ;
_R275_1   = XU3/3 R275/1 ;
DATA0_5   = XU2/109 ;
DATA1_5   = XU2/87 ;
DATA2_5   = XU2/130 ;
DATA3_5   = XU2/77 ;
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_R485_1   = XU2/140 R485/1 ;
DATA4_5   = XU2/89 ;
_R484_1   = XU2/145 R484/1 ;
DATA5_5   = XU2/63 ;
DATA6_5   = XU2/147 ;
DATA7_5   = XU2/112 ;
DATA8_5   = XU2/151 ;
DATA9_5   = XU2/153 ;
DATA10_5  = XU2/155 ;
DATA11_5  = XU2/79 ;
DATA12_5  = XU2/82 ;
DATA13_5  = XU2/114 ;
DATA14_5  = XU2/158 ;
DATA15_5  = XU2/90 ;
DATA16_5  = XU2/64 ;
DATA17_5  = XU2/102 ;
DATA18_5  = XU2/103 ;
DATA19_5  = XU2/86 ;
DATA20_5  = XU2/88 ;
'ERN0_5   = XU2/62 ;
'ERN1_5   = XU2/74 ;
'ERN2_5   = XU2/76 ;
'ERN3_5   = XU2/78 ;
'ERN4_5   = XU2/84 ;
'ERN5_5   = XU2/105 ;
'ERN6_5   = XU2/107 ;
'ERN7_5   = XU2/32 ;
_C425_2   = C425/2 R387/1 ;
_C426_2   = C426/2 R388/1 ;
_C427_2   = C427/2 R389/1 ;
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_C391_2   = C391/2 R352/1 ;
_C398_2   = R359/1 C398/2 ;
_C386_2   = C386/2 R350/1 ;
_C387_2   = C387/2 R347/1 ;
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_C394_2   = C394/2 R354/1 ;
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_C535_2   = C535/2 R503/1 ;
_C489_2   = C489/2 R464/1 ;
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_C368_1   = R326/2 C368/1 ;
_C353_1   = R305/2 C353/1 ;
_C357_1   = R311/2 C357/1 ;
_C358_1   = R312/2 C358/1 ;
_C369_1   = R327/2 C369/1 ;
_C533_1   = R501/2 C533/1 ;
_R314_1   = XU1/150 R314/1 ;
_C354_1   = R306/2 C354/1 ;
_C534_1   = R502/2 C534/1 ;
_C370_1   = R331/2 C370/1 ;
_C371_1   = R328/2 C371/1 ;
_C372_1   = R329/2 C372/1 ;
_C373_1   = R330/2 C373/1 ;
_C374_1   = R335/2 C374/1 ;
_C375_1   = R332/2 C375/1 ;
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_R316_1   = XU1/3 R316/1 ;
_C532_1   = R500/2 C532/1 ;
_C376_1   = R333/2 C376/1 ;
_R315_1   = XU1/118 R315/1 ;
_C377_1   = R334/2 C377/1 ;
_C378_1   = R337/2 C378/1 ;
_C379_1   = R336/2 C379/1 ;
_C479_1   = R441/2 C479/1 ;
HLDEN_4   = R80/2 S1/5 XU1/138 ;
NLAY2_4   = R81/2 S1/6 XU1/113 ;
NLAY1_4   = R82/2 S1/7 XU1/115 ;
NLAY0_4   = R83/2 S1/8 XU1/136 ;
_R317_1   = XU1/54 R317/1 ;
_R483_1   = XU1/128 R483/1 ;
_R482_1   = XU1/145 R482/1 ;
_C488_2   = C488/2 R463/1 ;
_C484_2   = C484/2 R457/1 ;
_C483_2   = C483/2 R454/1 ;
_C482_2   = C482/2 R453/1 ;
_R468_1   = XU12/44 R468/1 ;
_R462_1   = XU12/60 R462/1 ;
_R446_1   = XU12/59 R446/1 ;
_R445_1   = XU12/149 R445/1 ;
_R444_1   = XU12/54 R444/1 ;
_R447_1   = XU12/3 R447/1 ;
_C480_2   = C480/2 R443/1 ;
_C486_2   = C486/2 R459/1 ;
_C356_2   = C356/2 R308/1 ;
_C348_2   = C348/2 R273/1 ;
_R449_1   = XU12/83 R449/1 ;
_R450_1   = XU12/85 R450/1 ;
_R451_1   = XU12/49 R451/1 ;
_R452_1   = XU12/36 R452/1 ;
_R455_1   = XU12/118 R455/1 ;
_R456_1   = XU12/37 R456/1 ;
_C481_2   = C481/2 R448/1 ;
_C487_2   = C487/2 R460/1 ;
_C485_2   = C485/2 R458/1 ;
_R360_1   = XU12/53 R360/1 ;
'BPIF_14  = U95/10 XU12/77 ;
_R461_1   = XU12/5 R461/1 ;
_R465_1   = XU12/4 R465/1 ;
_R466_1   = XU12/152 R466/1 ;
_R467_1   = XU12/154 R467/1 ;
_U95_11   = U95/4 U95/11 ;
_R481_1   = U95/1 R481/1 ;
_C528_1   = R481/2 C528/1 U95/5 ;
_R488_1   = XU12/35 R488/1 ;
_R489_1   = XU12/105 R489/1 ;
_U95_13   = U95/13 U95/9 ;
_R496_2   = U15/12 U15/11 U15/10 R496/2
            U15/9 U15/8 U15/7 ;
_R497_2   = U17/12 U17/11 U17/10 R497/2
            U17/9 U17/8 U17/7 ;
_R62_1    = U15/66 R62/1 ;
_R65_1    = U17/66 R65/1 ;
_R63_1    = U15/35 R63/1 ;
_R66_1    = U17/35 R66/1 ;
_R64_1    = U15/33 R64/1 ;
_R67_1    = U17/33 R67/1 ;
'RWEN_3   = C47/1 U16/30 U15/30 U14/6 ;
'HWEN_3   = C48/1 U18/30 U17/30 U96/6 ;
_R498_2   = U16/13 U16/12 U16/11 R498/2
            U16/10 U16/9 U16/8 U16/7 ;
_R499_2   = U18/13 U18/12 U18/11 R499/2
            U18/10 U18/9 U18/8 U18/7 ;
_R491_1   = U16/66 R491/1 ;
_R490_1   = U18/66 R490/1 ;
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_R309_1   = U16/33 R309/1 ;
_R310_1   = U18/33 R310/1 ;
_C329_2   = C329/2 R254/2 ;
_C328_2   = C328/2 R253/2 ;
_C23_2    = C23/2 R68/2 ;
_C24_2    = C24/2 R59/2 ;
_C25_2    = C25/2 R60/2 ;
_C26_2    = C26/2 R61/2 ;
_C47_2    = C47/2 R69/2 ;
_C48_2    = C48/2 R70/2 ;
'RDA1_2   = U1/9 R14/2 J1/A1 ;
RDA1_2    = U1/10 R14/1 J1/A2 ;
RDA0_2    = U1/14 J1/B2 R13/1 ;
'RDA0_2   = U1/15 J1/B1 R13/2 ;
RDA3_2    = R16/1 J1/A4 U1/2 ;
RDA7_2    = R20/1 J1/A8 U8/2 ;
RDA11_2   = R24/1 J1/A12 U9/2 ;
'RDA3_2   = R16/2 J1/A3 U1/1 ;
'RDA7_2   = R20/2 J1/A7 U8/1 ;
'RDA11_2  = R24/2 J1/A11 U9/1 ;
RDA2_2    = U1/6 J1/B4 R15/1 ;
'RDA2_2   = U1/7 J1/B3 R15/2 ;
RDA6_2    = J1/B8 R19/1 U8/6 ;
RDA10_2   = J1/B12 R23/1 U9/6 ;
'RDA5_2   = U8/9 R18/2 J1/A5 ;
RDA5_2    = U8/10 R18/1 J1/A6 ;
RDA4_2    = U8/14 J1/B6 R17/1 ;
'RDA4_2   = U8/15 J1/B5 R17/2 ;
'RDA6_2   = J1/B7 R19/2 U8/7 ;
'RDA10_2  = J1/B11 R23/2 U9/7 ;
RDA9_2    = R22/1 J1/A10 U9/10 ;
'RDA9_2   = R22/2 J1/A9 U9/9 ;
RDA8_2    = U9/14 J1/B10 R21/1 ;
'RDA8_2   = U9/15 J1/B9 R21/2 ;
'RDA13_2  = U2/9 R26/2 J1/A13 ;
RDA13_2   = U2/10 R26/1 J1/A14 ;
RDA12_2   = U2/14 J1/B14 R25/1 ;
'RDA12_2  = U2/15 J1/B13 R25/2 ;
'RDA15_2  = U2/1 R28/2 J1/A15 ;
RDA15_2   = U2/2 R28/1 J1/A16 ;
RDA14_2   = U2/6 J1/B16 R27/1 ;
'RDA14_2  = U2/7 J1/B15 R27/2 ;
'RDA17_2  = U5/9 R46/2 J1/A17 ;
RDA17_2   = U5/10 R46/1 J1/A18 ;
RDA16_2   = U5/14 J1/B18 R45/1 ;
'RDA16_2  = U5/15 J1/B17 R45/2 ;
RDA19_2   = R48/1 J1/A20 U5/2 ;
ERDS_2    = R4/1 J1/A24 U10/2 ;
_R10_1    = U10/3 R10/1 ;
IRDS_2    = U14/1 R10/2 ;
'RDA19_2  = R48/2 U5/1 J1/A19 ;
RDA18_2   = U5/6 J1/B20 R47/1 ;
'RDA18_2  = U5/7 J1/B19 R47/2 ;
'ERDS_2   = R4/2 J1/A23 U10/1 ;
'RDA21_2  = U10/9 R50/2 J1/A21 ;
RDA21_2   = U10/10 R50/1 J1/A22 ;
RDA20_2   = U10/14 J1/B22 R49/1 ;
'RDA20_2  = U10/15 J1/B21 R49/2 ;
RDA22_2   = J1/B24 R51/1 U10/6 ;
'RDA22_2  = J1/B23 R51/2 U10/7 ;
_C490_1   = J1/A26 J1/A25 R471/1 C490/1 ;
'RHOLD_2  = U98/2 J1/B25 ;
RHOLD_2   = U98/3 J1/B26 ;
'HDA1_2   = U3/9 R30/2 J2/A1 ;
HDA1_2    = U3/10 R30/1 J2/A2 ;
HDA0_2    = U3/14 J2/B2 R29/1 ;
'HDA0_2   = U3/15 J2/B1 R29/2 ;
'HDA3_2   = U3/1 R32/2 J2/A3 ;
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HDA3_2    = U3/2 R32/1 J2/A4 ;
HDA2_2    = U3/6 J2/B4 R31/1 ;
'HDA2_2   = U3/7 J2/B3 R31/2 ;
'HDA5_2   = U6/9 R34/2 J2/A5 ;
HDA5_2    = U6/10 R34/1 J2/A6 ;
HDA4_2    = U6/14 J2/B6 R33/1 ;
'HDA4_2   = U6/15 J2/B5 R33/2 ;
HDA7_2    = R36/1 J2/A8 U6/2 ;
HDA11_2   = R40/1 J2/A12 U11/2 ;
'HDA7_2   = R36/2 J2/A7 U6/1 ;
'HDA11_2  = R40/2 J2/A11 U11/1 ;
HDA6_2    = U6/6 J2/B8 R35/1 ;
'HDA6_2   = U6/7 J2/B7 R35/2 ;
HDA10_2   = J2/B12 R39/1 U11/6 ;
'HDA9_2   = U11/9 R38/2 J2/A9 ;
HDA9_2    = U11/10 R38/1 J2/A10 ;
HDA8_2    = U11/14 J2/B10 R37/1 ;
'HDA8_2   = U11/15 J2/B9 R37/2 ;
'HDA10_2  = J2/B11 R39/2 U11/7 ;
'HDA13_2  = U4/9 R42/2 J2/A13 ;
HDA13_2   = U4/10 R42/1 J2/A14 ;
HDA12_2   = U4/14 J2/B14 R41/1 ;
'HDA12_2  = U4/15 J2/B13 R41/2 ;
'HDA15_2  = U4/1 R44/2 J2/A15 ;
HDA15_2   = U4/2 R44/1 J2/A16 ;
HDA14_2   = U4/6 J2/B16 R43/1 ;
'HDA14_2  = U4/7 J2/B15 R43/2 ;
'HDA17_2  = U7/9 R53/2 J2/A17 ;
HDA17_2   = U7/10 R53/1 J2/A18 ;
HDA16_2   = U7/14 J2/B18 R52/1 ;
'HDA16_2  = U7/15 J2/B17 R52/2 ;
'HDA19_2  = U7/1 R55/2 J2/A19 ;
HDA19_2   = U7/2 R55/1 J2/A20 ;
HDA18_2   = U7/6 J2/B20 R54/1 ;
'HDA18_2  = U7/7 J2/B19 R54/2 ;
'HDA21_2  = U12/9 R57/2 J2/A21 ;
HDA21_2   = U12/10 R57/1 J2/A22 ;
HDA20_2   = U12/14 J2/B22 R56/1 ;
'HDA20_2  = U12/15 J2/B21 R56/2 ;
EHDS_2    = R7/1 J2/A24 U12/2 ;
_R1_1     = U12/3 R1/1 ;
IHDS_2    = U96/1 R1/2 ;
'EHDS_2   = R7/2 U12/1 J2/A23 ;
HDA22_2   = U12/6 J2/B24 R58/1 ;
'HDA22_2  = U12/7 J2/B23 R58/2 ;
_C491_1   = J2/A26 J2/A25 R472/1 C491/1 ;
'HHOLD_2  = U13/2 J2/B25 ;
HHOLD_2   = U13/3 J2/B26 ;
_R11_1    = U14/3 R11/1 ;
_R12_1    = U96/3 R12/1 ;
_C13_2    = C13/2 R9/2 ;
_C15_2    = C15/2 R8/2 ;
2F0A_13   = U64/29 JP2/2 ;
1F1A_13   = U64/27 JP5/2 ;
FSA_13    = U64/3 JP8/2 ;
FBA_13    = R297/1 R198/1 U64/15 U64/17 ;
OSC_13    = R442/2 U64/1 ;
MREF_13   = R298/1 R199/1 U67/1 U64/14
            U65/1 ;
FSB_13    = JP15/2 U65/3 ;
2F1A_13   = U64/30 JP3/2 ;
1F0A_13   = U64/26 JP6/2 ;
4F0B_13   = U65/6 JP9/2 ;
4F1B_13   = JP4/2 U65/7 ;
3F0B_13   = JP7/2 U65/4 ;
3F1B_13   = JP10/2 U65/5 ;
2F0B_13   = JP11/2 U65/29 ;
2F1B_13   = JP14/2 U65/30 ;
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1F0B_13   = JP17/2 U65/26 ;
1F1B_13   = JP12/2 U65/27 ;
3F0C_13   = U67/4 JP18/2 ;
3F1C_13   = U67/5 JP13/2 ;
2F0C_13   = U67/29 JP16/2 ;
2F1C_13   = U67/30 JP19/2 ;
FSC_13    = JP22/2 U67/3 ;
FSD_13    = JP31/2 U66/3 ;
4F0D_13   = JP23/2 U66/6 ;
4F1D_13   = JP24/2 U66/7 ;
1F0C_13   = U67/26 JP20/2 ;
1F1C_13   = U67/27 JP21/2 ;
3F0D_13   = JP25/2 U66/4 ;
3F1D_13   = JP26/2 U66/5 ;
2F0D_13   = JP27/2 U66/29 ;
2F1D_13   = JP28/2 U66/30 ;
1F0D_13   = JP29/2 U66/26 ;
1F1D_13   = JP30/2 U66/27 ;
_R442_1   = U68/8 R442/1 ;
EO2_7     = J3/A4 U19/2 ;
EO6_7     = J3/A8 U21/2 ;
EO10_7    = J3/A12 U23/2 ;
'EO0_7    = U19/11 J3/A1 ;
EO0_7     = U19/10 J3/A2 ;
'EO2_7    = J3/A3 U19/3 ;
'EO6_7    = J3/A7 U21/3 ;
'EO10_7   = J3/A11 U23/3 ;
'EO1_7    = U19/13 J3/B1 ;
EO1_7     = U19/14 J3/B2 ;
EO3_7     = J3/B4 U19/6 ;
EO7_7     = J3/B8 U21/6 ;
EO11_7    = J3/B12 U23/6 ;
'EO3_7    = U19/5 J3/B3 ;
'EO7_7    = J3/B7 U21/5 ;
'EO11_7   = J3/B11 U23/5 ;
'EO4_7    = U21/11 J3/A5 ;
EO4_7     = U21/10 J3/A6 ;
'EO5_7    = U21/13 J3/B5 ;
EO5_7     = U21/14 J3/B6 ;
EO8_7     = J3/A10 U23/10 ;
'EO8_7    = J3/A9 U23/11 ;
EO9_7     = J3/B10 U23/14 ;
'EO9_7    = U23/13 J3/B9 ;
'EO12_7   = U20/11 J3/A13 ;
EO12_7    = U20/10 J3/A14 ;
'EO13_7   = U20/13 J3/B13 ;
EO13_7    = U20/14 J3/B14 ;
'EO14_7   = U20/3 J3/A15 ;
EO14_7    = U20/2 J3/A16 ;
'EO15_7   = U20/5 J3/B15 ;
EO15_7    = U20/6 J3/B16 ;
'EO16_7   = U22/11 J3/A17 ;
EO16_7    = U22/10 J3/A18 ;
'EO17_7   = U22/13 J3/B17 ;
EO17_7    = U22/14 J3/B18 ;
'EO18_7   = U22/3 J3/A19 ;
EO18_7    = U22/2 J3/A20 ;
EO22_7    = J3/A24 U24/2 ;
'EO19_7   = U22/5 J3/B19 ;
EO19_7    = U22/6 J3/B20 ;
'EO22_7   = J3/A23 U24/3 ;
'EO20_7   = U24/11 J3/A21 ;
EO20_7    = U24/10 J3/A22 ;
'EO21_7   = U24/13 J3/B21 ;
EO21_7    = U24/14 J3/B22 ;
EDS_7     = J3/B24 U24/6 ;
'EDS_7    = J3/B23 U24/5 ;
'EHLD_7   = R94/1 U25/1 J3/A25 ;
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EHLD_7    = R94/2 U25/2 J3/A26 ;
_R96_2    = U25/3 R96/2 ;
_C90_2    = C90/2 R95/2 ;
_C297_1   = C297/1 U78/6 ;
_C302_1   = C302/1 U78/14 ;
_C297_2   = C297/2 R221/1 U78/7 ;
_C302_2   = C302/2 R232/1 U78/15 ;
_D1_1     = U78/12 D1/1 ;
_D1_2     = D1/2 R222/2 ;
_U78_4    = U78/4 U82/5 ;
_D6_1     = U82/6 D6/1 ;
_D6_2     = D6/2 R231/2 ;
_C298_1   = C298/1 U79/6 ;
_C301_1   = C301/1 U79/14 ;
_C298_2   = C298/2 R223/1 U79/7 ;
_C301_2   = C301/2 R229/1 U79/15 ;
_D2_1     = U79/12 D2/1 ;
_D2_2     = D2/2 R224/2 ;
_U79_4    = U79/4 U97/5 ;
_D5_1     = U97/6 D5/1 ;
_D5_2     = D5/2 R230/2 ;
_C300_1   = C300/1 U80/6 ;
_C303_1   = C303/1 U80/14 ;
_C300_2   = C300/2 R227/1 U80/7 ;
_C303_2   = C303/2 R233/1 U80/15 ;
_U80_13   = U80/13 U91/5 ;
_D4_1     = U80/12 D4/1 ;
_D4_2     = D4/2 R228/2 ;
_D7_1     = U91/4 D7/1 ;
_D7_2     = D7/2 R234/2 ;
_C299_1   = C299/1 U93/14 ;
_C524_1   = C524/1 U81/14 ;
_C299_2   = C299/2 R225/1 U93/15 ;
_C524_2   = C524/2 R476/1 U81/15 ;
_D3_4     = U93/4 D3/4 ;
_D3_3     = D3/3 R226/2 ;
_U81_4    = U81/4 U94/5 ;
_D9_4     = U94/6 D9/4 ;
_D9_3     = D9/3 R477/2 ;
_C525_1   = C525/1 U81/6 ;
_R266_1   = R266/1 U93/7 ;
_D3_1     = D3/1 R480/2 ;
_C525_2   = C525/2 R479/1 U81/7 ;
_U81_12   = U81/12 U94/1 ;
_D9_6     = U94/3 D9/6 ;
_D9_5     = D9/5 R478/2 ;
_D9_2     = U94/11 D9/2 ;
_D9_1     = D9/1 R475/2 ;
_C304_2   = C304/2 U83/1 ;
_R235_1   = U83/3 R235/1 ;
_C305_1   = R235/2 C305/1 ;
RESET_16  = R474/1 U83/5 ;
_F1_1     = L1/2 F1/1 F2/1 F3/1 ;
D8_15     = P1/C1 U84/47 ;
D16_15    = P2/B14 U85/47 ;
'DTCK_15  = P1/A16 U86/26 ;
D0_15     = P1/A1 U84/46 ;
D17_15    = P2/B15 U85/46 ;
D9_15     = P1/C2 U84/44 ;
D18_15    = P2/B16 U85/44 ;
ERLOC_15  = P2/A2 U86/27 ;
'IBPI_15  = U88/43 R469/1 R216/2 ;
D1_15     = P1/A2 U84/43 ;
D19_15    = P2/B17 U85/43 ;
_P2_A1    = R216/1 P2/A1 ;
D10_15    = P1/C3 U84/41 ;
D20_15    = P2/B18 U85/41 ;
'CDOC_15  = P2/A26 U86/30 ;
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D2_15     = P1/A3 U84/40 ;
D21_15    = P2/B19 U85/40 ;
'IFRZ_15  = U88/46 R470/2 R217/1 ;
_P2_A3    = R217/2 P2/A3 ;
D11_15    = P1/C4 U84/38 ;
D22_15    = P2/B20 U85/38 ;
D3_15     = U84/37 P1/A4 ;
D23_15    = P2/B21 U85/37 ;
D4_15     = U84/35 P1/A5 ;
D12_15    = U84/36 P1/C5 ;
D24_15    = P2/B23 U85/36 ;
D5_15     = U84/32 P1/A6 ;
D13_15    = U84/33 P1/C6 ;
D25_15    = P2/B24 U85/35 ;
D6_15     = U84/29 P1/A7 ;
D14_15    = U84/30 P1/C7 ;
D26_15    = P2/B25 U85/33 ;
D7_15     = U84/26 P1/A8 ;
D15_15    = U84/27 P1/C8 ;
D27_15    = P2/B26 U85/32 ;
D28_15    = P2/B27 U85/30 ;
SYCK_15   = P1/A10 ;
D29_15    = P2/B28 U85/29 ;
D30_15    = P2/B29 U85/27 ;
DS1_15    = U89/47 P1/A12 ;
SYSRS_15  = P1/C12 ;
D31_15    = P2/B30 U85/26 ;
DS0_15    = U89/44 P1/A13 ;
LWORD_15  = U89/46 P1/C13 ;
WRITE_15  = U89/41 P1/A14 ;
AM5_15    = U89/43 P1/C14 ;
A23_15    = U89/40 P1/C15 ;
A22_15    = U89/38 P1/C16 ;
A21_15    = U89/32 P1/C17 ;
BIAS1_15  = U89/48 U90/48 P1/D1 U87/48
            U86/48 U84/48 ;
BIAS3_15  = P2/D32 U88/48 U85/48 ;
AS_15     = U89/26 P1/A18 ;
A20_15    = U89/29 P1/C18 ;
A19_15    = U90/47 P1/C19 ;
IACK_15   = U90/43 P1/A20 ;
A18_15    = U90/44 P1/C20 ;
_P1_A21   = P1/A21 P1/A22 ;
A17_15    = U90/41 P1/C21 ;
A12_15    = P1/C26 U87/47 ;
A24_15    = P2/B4 U88/47 ;
A16_15    = U90/38 P1/C22 ;
A5_15     = P1/A26 U87/46 ;
AM4_15    = U90/35 P1/A23 ;
A15_15    = U90/33 P1/C23 ;
A25_15    = P2/B5 U88/44 ;
A7_15     = U90/30 P1/A24 ;
A14_15    = U90/29 P1/C24 ;
A11_15    = P1/C27 U87/43 ;
A6_15     = U90/27 P1/A25 ;
A13_15    = U90/26 P1/C25 ;
A4_15     = P1/A27 U87/41 ;
A26_15    = P2/B6 U88/41 ;
A10_15    = P1/C28 U87/38 ;
A27_15    = P2/B7 U88/38 ;
A3_15     = U87/37 P1/A28 ;
A2_15     = U87/33 P1/A29 ;
A9_15     = U87/35 P1/C29 ;
A28_15    = P2/B8 U88/36 ;
A1_15     = U87/27 P1/A30 ;
A8_15     = U87/30 P1/C30 ;
-12V_15   = P1/A31 ;
+12V_15   = P1/C31 ;
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A29_15    = P2/B9 U88/33 ;
AM1_15    = U89/33 P1/B17 ;
A30_15    = P2/B10 U88/30 ;
AM2_15    = U89/27 P1/B18 ;
AM3_15    = U90/46 P1/B19 ;
A31_15    = P2/B11 U88/27 ;
_P1_B4    = P1/B4 P1/B5 ;
_P1_B6    = P1/B6 P1/B7 ;
_P1_B8    = P1/B8 P1/B9 ;
_P1_B10   = P1/B10 P1/B11 ;
AM0_15    = U89/36 P1/B16 ;
BIAS2_15  = P1/D32 ;
_R492_1   = STRP1/1 R492/1 ;
_R492_2   = R492/2 R493/1 ;
_R494_1   = STRP2/1 R494/1 ;
_R494_2   = R494/2 R495/1 ;
VCC       = C150/1 C149/1 C148/1 C147/1
            C146/1 C145/1 C144/1 C143/1
            U54/22 U53/22 U52/22 U51/22
            R102/2 R103/2 R104/2 R105/2
            9P9/1 9P6/1 U54/28 U53/28
            9P3/1 9P5/1 U52/28 U51/28
            U50/22 U49/22 U48/22 U47/22
            R101/2 R100/2 R107/2 R106/2
            9P8/1 9P7/1 U50/28 U49/28
            9P4/1 9P2/1 U48/28 U47/28
            C142/1 C141/1 C140/1 C139/1
            U46/24 U46/8 U42/24 U42/8
            U38/24 U38/8 U34/24 U34/8
            C138/1 C137/1 C136/1 C135/1
            C134/1 C133/1 C132/1 C131/1
            C130/1 C129/1 C128/1 C127/1
            U45/24 U45/8 U41/24 U41/8
            U37/24 U37/8 U33/24 U33/8
            C126/1 C125/1 C124/1 C123/1
            C122/1 C121/1 C120/1 C119/1
            C118/1 C117/1 C116/1 C115/1
            U44/24 U44/8 U40/24 U40/8
            U36/24 U36/8 U32/24 U32/8
            C114/1 C113/1 C112/1 C111/1
            U43/24 U43/8 U39/24 U39/8
            U35/24 U35/8 U31/24 U31/8
            C107/1 C106/1 C105/1 C101/1
            C100/1 C104/1 C103/1 C102/1
            C99/1 C98/1 U30/24 U30/8
            U29/24 U29/8 U27/24 U27/8
            10P1/1 XU9/41 XU9/32 XU9/21
            U28/24 U28/8 U26/24 U26/8
            C110/1 C109/1 C108/1 C89/1
            C88/1 C87/1 C86/1 C85/1
            C84/1 C80/1 C79/1 C78/1
            C77/1 C76/1 C75/1 C83/1
            C82/1 C81/1 XU7/41 XU7/32
            XU7/21 XU8/41 XU8/32 XU8/21
            R271/1 XU6/41 XU6/32 XU6/21
            XU5/41 XU5/32 XU5/21 XU4/41
            XU4/32 XU4/21 C168/1 C167/1
            C166/1 C165/1 C164/1 C163/1
            C162/1 C161/1 C160/1 C159/1
            C158/1 C157/1 C156/1 C155/1
            C154/1 C153/1 C152/1 C151/1
            U60/24 U60/8 U63/24 U63/8
            U57/24 U57/8 U59/24 U59/8
            U62/24 U62/8 U56/24 U56/8
            U58/24 U58/8 U61/24 U61/8
            U55/24 U55/8 XU10/147 XU10/151
            XU10/153 XU10/155 XU10/158 XU10/62
            XU10/63 XU10/64 R346/2 R345/2
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R344/2 C188/1 C187/1 C186/1
C185/1 C177/1 C176/1 C175/1
C174/1 C183/1 C182/1 C181/1
C180/1 C179/1 XU11/157 XU11/141
XU11/121 XU11/94 XU11/81 XU11/61
XU11/46 XU11/41 XU11/10 XU11/1
C173/1 C172/1 C171/1 C170/1
C169/1 XU10/157 XU10/141 XU10/121
XU10/94 XU10/81 XU10/61 XU10/46
XU10/41 XU10/10 XU10/1 C71/1
C70/1 C74/1 C73/1 C72/1
C66/1 C65/1 C69/1 C68/1
C64/1 C63/1 C62/1 XU3/41
XU3/32 XU3/21 R88/1 R89/1
XU2/157 XU2/141 XU2/121 XU2/94
XU2/81 XU2/61 XU2/46 XU2/41
XU2/10 XU2/1 C352/1 C351/1
C350/1 C283/1 C282/1 C281/1
C292/1 C291/1 C290/1 C280/1
C279/1 C278/1 C289/1 C288/1
C287/1 C286/1 C285/1 C284/1
XU17/41 XU17/32 XU17/21 XU16/41
XU16/32 XU16/21 XU18/41 XU18/32
XU18/21 XU15/41 XU15/32 XU15/21
XU14/41 XU14/32 XU14/21 XU13/41
XU13/32 XU13/21 C56/1 C55/1
C61/1 C60/1 C59/1 C53/1
C52/1 C50/1 C49/1 R80/1
R81/1 R82/1 R83/1 R86/1
R85/1 R84/1 R87/1 R71/2
R72/2 R73/2 R74/2 R75/2
R76/2 R77/2 R78/2 R79/2
XU1/157 XU1/141 XU1/121 XU1/94
XU1/81 XU1/61 XU1/46 XU1/41
XU1/10 XU1/1 C254/1 6P5/1
UB72/24 R473/2 R213/2 R214/2
R200/2 R201/2 R202/2 R203/2
R204/2 R205/2 R206/2 R208/2
R313/2 C253/1 U95/14 UA72/24
C529/1 C252/1 UB71/24 C251/1
UA71/24 C273/1 C262/1 C261/1
C260/1 C259/1 C258/1 C257/1
C256/1 C255/1 C264/1 C263/1
XU12/157 XU12/141 XU12/121 XU12/94
XU12/81 XU12/61 XU12/46 XU12/41
XU12/10 XU12/1 U73/28 C46/1
C21/1 C22/1 C17/1 C19/1
C18/1 C20/1 C45/1 C327/1
C326/1 C325/1 C324/1 C323/1
C322/1 U18/3 U16/3 U18/60
U16/60 C40/1 C42/1 U18/68
U18/65 U18/54 U18/48 U18/43
U18/32 U18/16 U16/68 U16/65
U16/54 U16/48 U16/43 U16/32
U16/16 C37/1 C38/1 C33/1
U96/14 U14/14 C35/1 C34/1
C36/1 U17/3 U15/3 U17/60
U15/60 C31/1 C32/1 C27/1
C29/1 C28/1 C30/1 U17/68
U17/65 U17/54 U17/48 U17/43
U17/32 U17/16 U15/68 U15/65
U15/54 U15/48 U15/43 U15/32
U15/16 U98/4 U13/4 C530/1
C16/1 C12/1 C8/1 C10/1
C9/1 C11/1 C4/1 U98/16
U13/16 U12/4 U7/4 U4/4
C41/1 C6/1 C5/1 C7/1
C1/1 C3/1 C2/1 C14/1

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              U12/16 U7/16 U4/16 U11/4
              U6/4 U3/4 U11/16 U6/16
              U3/16 U2/4 U10/4 U5/4
              U2/16 U10/16 U5/16 U9/4
              U8/4 U1/4 U9/16 U8/16
              U1/16 R296/2 R294/2 R293/2
              R292/2 R291/2 R290/2 R288/2
              R287/2 R285/2 R284/2 R283/2
              R282/2 R280/2 R279/2 R278/2
              C492/1 L2/1 R304/2 R302/2
              R301/2 R300/2 R299/2 C96/1
              C95/1 C97/1 C91/1 C93/1
              C92/1 C94/1 U25/4 U25/16
              U24/4 U22/4 U20/4 U24/16
              U22/16 U20/16 U23/4 U21/4
              U19/4 U23/16 U21/16 U19/16
              C531/1 C527/1 C526/1 C523/1
              C343/1 C342/1 C293/1 C295/1
              C294/1 C296/1 U83/7 U83/2
              U94/13 R475/1 U83/8 R236/2
              R478/1 U81/10 U81/11 U93/9
              U93/10 U93/11 R479/2 R480/1
              R266/2 U94/14 R477/1 U81/2
              U81/3 R226/1 U93/2 U93/3
              R476/2 R225/2 U81/16 U93/16
              R234/1 U80/3 U91/14 R228/1
              U80/10 U80/11 R233/2 R227/2
              U80/16 R230/1 U79/2 U79/3
              R224/1 U79/10 U79/11 R229/2
              R223/2 U79/16 U82/14 R231/1
              U97/14 U78/2 U78/3 R222/1
              U78/10 U78/11 R232/2 R221/2
              U78/16 C519/1 C520/1 C521/1
              C522/1 C515/1 C516/1 C517/1
              C518/1 C511/1 C512/1 C513/1
              C514/1 C510/1 C509/1 C508/1
              C507/1 U89/42 U89/31 U89/18
              U89/7 U90/42 U90/31 U90/18
              U90/7 C503/1 C504/1 C505/1
              C506/1 C499/1 C500/1 C501/1
              C502/1 C498/1 C497/1 C496/1
              C495/1 U88/42 U88/31 U88/18
              U88/7 U87/42 U87/31 U87/18
              U87/7 R470/1 U86/42 U86/31
              U86/18 U86/7 U85/42 U85/31
              U85/18 U85/7 U84/42 U84/31
              U84/18 U84/7 R469/2 F1/2
              F2/2 C272/1 C270/1 D8/1
              F3/2 ;
ASS3      = C399/1 U50/10 U49/10 U48/10
              U47/10 XU13/3 ;
ASS4      = C400/1 U50/9 U49/9 U48/9
              U47/9 XU14/38 ;
ASS6      = C401/1 U50/8 U49/8 U48/8
              U47/8 XU14/36 ;
ASS7      = C402/1 U50/7 U49/7 U48/7
              U47/7 XU14/35 ;
ASS9      = C403/1 U50/6 U49/6 U48/6
              U47/6 XU15/37 ;
ASS11     = C404/1 U50/5 U49/5 U48/5
              U47/5 XU15/35 ;
ASS13     = C405/1 U50/4 U49/4 U48/4
              U47/4 XU18/37 ;
ASS14     = C406/1 U50/3 U49/3 U48/3
              U47/3 XU18/36 ;
ASS12     = C407/1 U50/25 U49/25 U48/25
              U47/25 XU18/38 ;
ASS10     = C408/1 U50/24 U49/24 U48/24
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            U47/24 XU15/36 ;
M0        = C314/1 U47/26 R106/1 XU17/28
            XU16/28 ;
M1        = C315/1 U48/26 R107/1 XU17/42
            XU16/42 ;
M2        = C316/1 U49/26 R100/1 XU17/4
            XU16/44 ;
M3        = C317/1 U50/26 R101/1 XU17/3
            XU16/43 ;
ASS5      = C409/1 U50/21 U49/21 U48/21
            U47/21 XU14/37 ;
ASS8      = C410/1 U50/23 U49/23 U48/23
            U47/23 XU15/38 ;
ASS15     = C411/1 U50/2 U49/2 U48/2
            U47/2 XU18/35 ;
GND       = R386/2 R385/2 R384/2 R383/2
            R382/2 R381/2 R380/2 R379/2
            R378/2 R377/2 R376/2 R375/2
            R374/2 R373/2 R372/2 R371/2
            R370/2 R369/2 R368/2 R367/2
            R366/2 R365/2 R364/2 R363/2
            R362/2 R361/2 R252/2 R251/2
            R250/2 R249/2 R248/2 R247/2
            R246/2 R245/2 R244/2 R243/2
            R242/2 R241/2 R240/2 R239/2
            R238/2 R237/2 C150/2 C149/2
            C148/2 C147/2 C146/2 C145/2
            C144/2 C143/2 U54/14 U53/14
            U52/14 U51/14 U54/20 U53/20
            U52/20 U51/20 U50/14 U49/14
            U48/14 U47/14 U50/20 U49/20
            U48/20 U47/20 U46/25 U46/9
            U42/25 U42/9 U38/25 U38/9
            U34/25 U34/9 C142/2 C141/2
            C140/2 C139/2 C138/2 C137/2
            C136/2 C135/2 U45/25 U45/9
            U41/25 U41/9 U37/25 U37/9
            U33/25 U33/9 C134/2 C133/2
            C132/2 C131/2 C130/2 C129/2
            C128/2 C127/2 C126/2 C125/2
            C124/2 C123/2 U44/25 U44/9
            U40/25 U40/9 U36/25 U36/9
            U32/25 U32/9 C122/2 C121/2
            C120/2 C119/2 C118/2 C117/2
            C116/2 C115/2 U43/25 U43/9
            U39/25 U39/9 U35/25 U35/9
            U31/25 U31/9 C114/2 C113/2
            C112/2 C111/2 R265/2 R264/2
            C107/2 C106/2 C105/2 C101/2
            C100/2 U30/25 U30/9 R263/2
            R262/2 R261/2 R260/2 R259/2
            R258/2 R257/2 R256/2 R255/2
            C104/2 C103/2 C102/2 C99/2
            C98/2 U30/17 R99/2 U29/25
            U29/9 U27/25 U27/9 U29/17
            R98/2 U28/25 U28/9 U26/25
            U26/9 U28/17 R97/2 C110/2
            C109/2 C108/2 C89/2 C88/2
            C87/2 C86/2 C85/2 C84/2
            C80/2 C79/2 C78/2 C77/2
            C76/2 C75/2 C83/2 C82/2
            C81/2 XU7/11 XU7/37 XU7/38
            XU8/25 XU8/37 XU8/38 XU6/25
            XU6/37 XU6/38 XU4/25 XU4/37
            XU4/38 XU5/15 XU5/16 XU5/27
            C168/2 C167/2 C166/2 C165/2
            C164/2 C163/2 C162/2 C161/2
            C160/2 C159/2 C158/2 C157/2
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C156/2 C155/2 C154/2 C153/2
C152/2 C151/2 U60/25 U60/9
U63/25 U63/9 U57/25 U57/9
R269/2 R108/2 R268/2 U59/25
U59/9 U62/25 U62/9 U56/25
U56/9 R267/2 U58/25 U58/9
U61/25 U61/9 U55/25 U55/9
R109/2 R487/2 R486/2 XU10/129
XU10/72 XU10/113 XU10/115 XU10/126
XU10/134 XU10/135 XU10/136 XU10/138
XU10/139 XU10/140 R426/2 R425/2
R424/2 XU10/86 XU10/88 XU10/68
XU10/71 XU10/73 XU10/122 XU10/124
XU10/105 XU10/107 XU10/109 XU10/112
XU10/114 XU10/123 XU10/125 XU10/128
XU10/116 XU10/130 R423/2 R422/2
R421/2 R420/2 R419/2 R418/2
R417/2 R416/2 R415/2 R414/2
R413/2 XU10/75 XU10/97 XU10/98
XU10/101 R398/2 R397/2 R343/1
R396/2 R339/1 R338/1 R412/2
R411/2 R410/2 R409/2 R111/2
R307/1 R408/2 R407/2 R406/2
R405/2 R404/2 R403/2 R402/2
R401/2 R400/2 C188/2 C187/2
C186/2 C185/2 R399/2 R395/2
R394/2 R393/2 R440/2 R439/2
R438/2 R437/2 R436/2 C177/2
C176/2 C175/2 C174/2 R435/2
R434/2 R433/2 R432/2 R431/2
R430/2 R429/2 R428/2 R427/2
R392/2 R391/2 C183/2 C182/2
C181/2 C180/2 C179/2 R390/2
C173/2 C172/2 C171/2 C170/2
C169/2 C71/2 C70/2 C74/2
C73/2 C72/2 C66/2 C65/2
C69/2 C68/2 C64/2 C63/2
C62/2 R485/2 R484/2 XU2/106
XU2/133 XU2/116 XU2/68 XU2/104
XU2/129 XU2/97 XU2/108 XU2/111
XU2/92 XU2/95 XU2/37 XU2/29
XU2/128 XU2/125 XU2/34 XU2/71
XU2/73 XU2/75 XU2/85 XU2/98
XU2/101 XU2/113 XU2/117 XU2/122
XU2/124 XU2/135 XU2/138 XU2/139
R90/1 C352/2 C351/2 C350/2
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C291/2 C290/2 C280/2 C279/2
C278/2 C289/2 C288/2 C287/2
C286/2 C285/2 C284/2 R464/2
R503/2 R355/2 R354/2 R353/2
R356/2 R358/2 R357/2 R349/2
R348/2 R347/2 R350/2 R389/2
R388/2 R387/2 R352/2 R351/2
R359/2 C56/2 C55/2 C61/2
C60/2 C59/2 R483/2 R482/2
XU1/114 XU1/116 XU1/123 XU1/125
C53/2 C52/2 C50/2 C49/2
S1/1 S1/2 S1/3 S1/4
R270/2 R441/1 R336/1 R337/1
R334/1 R333/1 R500/1 R332/1
R335/1 R330/1 R329/1 R328/1
R331/1 R502/1 R306/1 R501/1
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R326/1 R325/1 R324/1 R323/1
R322/1 R321/1 R320/1 R319/1
R318/1 R207/2 R276/2 R272/2
R209/2 R210/2 R211/2 R212/2

UB72/12 S2/1 S2/2 S2/3
S2/4 S2/5 C254/2 UB72/23
UB72/14 UB72/11 9P14/1 XU12/158
XU12/155 XU12/153 XU12/151 XU12/147
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XU12/128 XU12/125 XU12/123 XU12/116
XU12/114 XU12/112 XU12/109 XU12/107
R488/2 R489/2 U95/8 UA72/12
C528/2 C253/2 UA72/23 UA72/14
UA72/11 9P13/1 U95/2 U95/6
U95/7 R458/2 R460/2 R448/2
C529/2 UB71/12 C252/2 UB71/23
UB71/14 UB71/11 9P12/1 R273/2
R308/2 R459/2 R443/2 UA71/12
C251/2 UA71/23 UA71/14 UA71/11
R453/2 R454/2 R457/2 R463/2
9P11/1 U73/14 U73/22 C273/2
C262/2 C261/2 C260/2 C259/2
C258/2 C257/2 C256/2 C255/2
C264/2 C263/2 C46/2 C21/2
C22/2 C17/2 C19/2 C18/2
C20/2 R70/1 R69/1 R61/1
R60/1 R59/1 R68/1 R253/1
R254/1 C45/2 C327/2 C326/2
C325/2 C324/2 C323/2 C322/2
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U18/45 U18/40 U18/18 U18/6
U16/67 U16/62 U16/57 U16/51
U16/45 U16/40 U16/18 U16/6
U18/28 U16/28 U18/31 U18/34
U16/31 U16/34 C40/2 C42/2
R499/1 R498/1 C37/2 C38/2
C33/2 U96/7 U14/7 U96/9
U96/10 U14/9 U14/10 C35/2
C34/2 C36/2 U17/67 U17/62
U17/57 U17/51 U17/45 U17/40
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U15/57 U15/51 U15/45 U15/40
U15/18 U15/6 U17/28 U15/28
U17/31 U17/34 U15/31 U15/34
C31/2 C32/2 C27/2 R497/1
R496/1 C29/2 C28/2 C30/2
U96/13 U14/13 R8/1 R9/1
U98/8 U13/8 U98/12 U13/12
U96/2 C530/2 C16/2 C12/2
C8/2 C10/2 C9/2 C11/2
C4/2 U14/2 C41/2 C6/2
C5/2 C7/2 C1/2 C3/2
C2/2 C14/2 U12/8 U7/8
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U9/8 U8/8 U1/8 U9/12
U8/12 U1/12 R199/2 R198/2
R185/2 R196/2 R184/2 R183/2
R182/2 R181/2 R180/2 R192/2
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R197/2 R174/2 R173/2 R172/2
R193/2 C493/2 C494/2 C492/2
R190/2 R188/2 R187/2 R186/2
R195/2 JP31/3 JP30/3 JP29/3
C216/2 C218/2 C220/2 C219/2
C208/2 C210/2 C212/2 C211/2
JP28/3 JP27/3 JP26/3 U66/32
U66/28 U66/22 U66/21 U66/13

U66/12 U67/32 U67/28 U67/22
U67/21 U67/13 U67/12 JP25/3
JP24/3 JP23/3 JP22/3 JP21/3
JP20/3 U66/31 U67/31 JP19/3
JP16/3 JP13/3 JP18/3 JP15/3
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C201/2 C189/2 C192/2 C194/2
C193/2 JP17/3 JP14/3 JP11/3
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U65/13 U65/12 U64/32 U64/28
U64/22 U64/21 U64/13 U64/12
JP10/3 JP7/3 JP4/3 U64/4
U64/5 JP9/3 JP6/3 JP3/3
U65/31 U64/31 JP8/3 JP5/3
JP2/3 C96/2 C95/2 C97/2
C91/2 C93/2 C92/2 C94/2
R95/1 U25/8 U25/12 U24/8
U22/8 U20/8 U24/12 U22/12
U20/12 J3/B26 J3/B25 U23/8
U21/8 U19/8 U23/12 U21/12
U19/12 C531/2 C527/2 C526/2
C523/2 C343/2 C342/2 C293/2
C295/2 C294/2 C296/2 U83/4
C305/2 C304/1 U97/1 U97/2
U97/9 U97/10 U97/12 U97/13
U82/1 U82/2 U82/9 U82/10
U82/12 U82/13 U91/2 U91/3
U91/8 U91/9 U91/11 U91/12
U94/9 U94/10 D3/2 U81/8
U94/7 U93/8 U91/7 U80/8
U80/1 U79/8 U97/7 U78/8
U82/7 XU9/31 XU9/23 XU9/10
XU7/31 XU7/23 XU7/10 XU8/31
XU8/23 XU8/10 XU6/31 XU6/23
XU6/10 XU4/31 XU4/23 XU4/10
XU5/31 XU5/23 XU5/10 XU10/160
XU10/137 XU10/127 XU10/120 XU10/110
XU10/100 XU10/99 XU10/80 XU10/70
XU10/51 XU10/40 XU10/31 XU10/20
XU11/160 XU11/137 XU11/127 XU11/120
XU11/110 XU11/100 XU11/99 XU11/80
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XU11/20 XU2/160 XU2/137 XU2/127
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XU18/23 XU18/10 XU15/31 XU15/23
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XU1/51 XU1/40 XU1/31 XU1/20
XU12/160 XU12/137 XU12/127 XU12/120
XU12/110 XU12/100 XU12/99 XU12/80
XU12/70 XU12/51 XU12/40 XU12/31
XU12/20 P2/Z32 P1/Z32 P2/D31
P1/D31 P2/Z30 P1/Z30 P2/Z28
P1/Z28 P2/Z26 P1/Z26 P2/Z24
P1/Z24 P2/Z22 P1/Z22 C519/2
C520/2 C521/2 C522/2 U89/45
U89/39 U89/34 U89/28 U89/21
U89/15 U89/10 U89/4 U90/45
U90/39 U90/34 U90/28 U90/21
U90/15 U90/10 U90/4 P2/Z20
P1/Z20 P2/Z18 P1/Z18 U89/37
U89/35 U89/30 U89/1 U89/24

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            U89/25 U90/40 U90/37 U90/36
            U90/32 U90/1 U90/24 U90/25
            P2/Z16 P1/Z16 C515/2 C516/2
            C517/2 C518/2 P2/Z14 P1/Z14
            P2/Z12 P1/Z12 P2/Z10 P1/Z10
            C511/2 C512/2 C513/2 C514/2
            P2/Z8 P1/Z8 P2/Z6 P1/Z6
            P2/Z4 P1/Z4 C510/2 C509/2
            C508/2 C507/2 P2/Z2 P1/D2
            P1/Z2 P2/B22 P2/B31 C503/2
            C504/2 C505/2 C506/2 P2/B12
            U88/45 U88/39 U88/34 U88/28
            U88/21 U88/15 U88/10 U88/4
            U87/45 U87/39 U87/34 U87/28
            U87/21 U87/15 U87/10 U87/4
            C499/2 C500/2 C501/2 C502/2
            P1/B23 U88/40 U88/37 U88/35
            U88/32 U88/29 U88/26 U88/1
            U88/24 U88/25 U87/44 U87/40
            U87/36 U87/32 U87/29 U87/26
            U87/1 U87/24 U87/25 P1/B20
            P2/B2 C498/2 C497/2 C496/2
            C495/2 U86/45 U86/39 U86/34
            U86/28 U86/21 U86/15 U86/10
            U86/4 P1/A19 U85/45 U85/39
            U85/34 U85/28 U85/21 U85/15
            U85/10 U85/4 U84/45 U84/39
            U84/34 U84/28 U84/21 U84/15
            U84/10 U84/4 P1/A17 U86/43
            U86/41 U86/44 U86/46 U86/47
            U86/2 U86/1 U86/25 P1/A15
            P1/A11 P1/C9 P1/A9 U86/17
            U86/33 U86/12 U86/37 U86/8
            D8/2 C270/2 C272/2 C271/2
            C349/2 TP13/1 TP12/1 TP11/1
            TP10/1 R495/2 TP9/1 TP8/1
            TP7/1 R493/2 TP6/1 TP5/1
            TP4/1 TP3/1 TP2/1 TP1/1 ;
'W0       = C306/1 U47/27 XU16/39 ;
'W1       = C307/1 U48/27 XU16/38 ;
'W2       = C308/1 U49/27 XU16/37 ;
'W3       = C309/1 U50/27 XU16/36 ;
'RESTAG   = U54/1 U53/1 U52/1 U51/1
            U50/1 U49/1 U48/1 U47/1
            XU1/42 C374/2 ;
BSS3      = C412/1 U54/10 U53/10 U52/10
            U51/10 XU13/2 ;
BSS7      = C413/1 U54/9 U53/9 U52/9
            U51/9 XU14/2 ;
BSS5      = C414/1 U54/8 U53/8 U52/8
            U51/8 XU14/4 ;
BSS4      = C415/1 U54/7 U53/7 U52/7
            U51/7 XU14/34 ;
BSS10     = C416/1 U54/6 U53/6 U52/6
            U51/6 XU15/3 ;
BSS8      = C417/1 U54/5 U53/5 U52/5
            U51/5 XU15/34 ;
BSS14     = C418/1 U54/4 U53/4 U52/4
            U51/4 XU18/3 ;
BSS13     = C419/1 U54/3 U53/3 U52/3
            U51/3 XU18/4 ;
BSS15     = C420/1 U54/25 U53/25 U52/25
            U51/25 XU18/2 ;
BSS9      = C421/1 U54/24 U53/24 U52/24
            U51/24 XU15/4 ;
M4        = C318/1 U51/26 R105/1 XU17/2
            XU16/7 ;
M5        = C319/1 U52/26 R104/1 XU17/44
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            XU16/20 ;
M6          = C320/1 U53/26 R103/1 XU17/43
              XU16/19 ;
M7          = C321/1 U54/26 R102/1 XU17/7
              XU16/18 ;
BSS6        = C422/1 U54/21 U53/21 U52/21
              U51/21 XU14/3 ;
BSS11       = C423/1 U54/23 U53/23 U52/23
              U51/23 XU15/2 ;
BSS12       = C424/1 U54/2 U53/2 U52/2
              U51/2 XU18/34 ;
'W4         = C310/1 U51/27 XU16/35 ;
'W5         = C311/1 U52/27 XU16/4 ;
'W6         = C312/1 U53/27 XU16/3 ;
'W7         = C313/1 U54/27 XU16/2 ;
BMAPAD2     = U42/1 U38/1 U41/1 U37/1
              U32/1 U31/1 C431/1 XU1/111 ;
LKOLL0      = U41/27 U33/27 U39/6 U31/6
              U26/6 XU13/27 ;
AMAPAD5     = U44/1 U36/1 U43/1 U35/1
              U27/1 U26/1 XU11/86 C428/1
              XU2/23 ;
LKOHL0      = U45/6 U37/6 U43/6 U35/6
              XU13/12 ;
CMAPAD1     = U46/1 U34/1 U45/1 U33/1
              U40/1 U39/1 C434/1 XU1/117 ;
BMAPAD0     = U42/2 U38/2 U41/2 U37/2
              U32/2 U31/2 C432/1 XU1/86 ;
LKOLL3      = U41/26 U33/26 U39/7 U31/7
              U26/7 XU13/11 ;
AMAPAD3     = U44/2 U36/2 U43/2 U35/2
              U27/2 U26/2 XU11/77 C429/1
              XU2/19 ;
LKOHL1      = U45/7 U37/7 U43/7 U35/7
              XU13/13 ;
CMAPAD2     = U46/2 U34/2 U45/2 U33/2
              U40/2 U39/2 C435/1 XU1/122 ;
BMAPAD9     = U42/3 U38/3 U41/3 U37/3
              U32/3 U31/3 XU11/122 C433/1 ;
LKOLL2      = U41/23 U33/23 U39/10 U31/10
              U26/10 XU13/9 ;
AMAPAD11    = U44/3 U36/3 U43/3 U35/3
              U27/3 U26/3 XU11/82 C430/1
              XU2/5 ;
LKOHL2      = U45/10 U37/10 U43/10 U35/10
              XU13/14 ;
CMAPAD8     = U46/3 U34/3 U45/3 U33/3
              U40/3 U39/3 C436/1 XU11/16 ;
BMAPAD6     = U42/4 U38/4 U41/4 U37/4
              U32/4 U31/4 C437/1 XU11/111 ;
LKOLL1      = U41/22 U33/22 U39/11 U31/11
              U26/11 XU13/8 ;
AMAPAD13    = U44/4 U36/4 U43/4 U35/4
              U27/4 U26/4 XU11/92 C465/1
              XU2/150 ;
LKOHL3      = U45/11 U37/11 U43/11 U35/11
              XU13/15 ;
CMAPAD12    = U46/4 U34/4 U45/4 U33/4
              U40/4 U39/4 XU11/132 C451/1 ;
BMAPAD15    = U42/13 U38/13 U41/13 U37/13
              U32/13 U31/13 XU11/29 C438/1 ;
LKOLL4      = U41/11 U33/11 U39/22 U31/22
              U26/22 XU14/27 ;
AMAPAD9     = U44/13 U36/13 U43/13 U35/13
              U27/13 U26/13 XU11/103 C466/1
              XU2/143 ;
LKOHL6      = U45/22 U37/22 U43/22 U35/22
              XU14/8 ;
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CMAPAD6   = U46/13 U34/13 U45/13 U33/13
            U40/13 U39/13 C452/1 XU11/12 ;
BMAPAD13  = U42/14 U38/14 U41/14 U37/14
            U32/14 U31/14 XU11/34 C439/1 ;
LKOLL5    = U41/10 U33/10 U39/23 U31/23
            U26/23 XU14/26 ;
AMAPAD6   = U44/14 U36/14 U43/14 U35/14
            U27/14 U26/14 XU11/88 C467/1
            XU2/148 ;
LKOHL4    = U45/23 U37/23 U43/23 U35/23
            XU14/22 ;
CMAPAD4   = U46/14 U34/14 U45/14 U33/14
            U40/14 U39/14 C453/1 XU11/159 ;
BMAPAD3   = U42/15 U38/15 U41/15 U37/15
            U32/15 U31/15 C440/1 XU11/97 ;
LKOLL6    = U41/7 U33/7 U39/26 U31/26
            U26/26 XU14/25 ;
AMAPAD0   = U44/15 U36/15 U43/15 U35/15
            U27/15 U26/15 C468/1 XU2/154
            XU1/64 ;
LKOHL7    = U45/26 U37/26 U43/26 U35/26
            XU14/9 ;
CMAPAD16  = U46/15 U34/15 U45/15 U33/15
            U40/15 U39/15 XU11/85 C454/1 ;
BMAPAD16  = U42/16 U38/16 U41/16 U37/16
            U32/16 U31/16 XU11/37 C441/1 ;
LKOLL7    = U41/6 U33/6 U39/27 U31/27
            U26/27 XU14/24 ;
AMAPAD15  = U44/16 U36/16 U43/16 U35/16
            U27/16 U26/16 XU11/25 C469/1
            XU2/53 ;
LKOHL5    = U45/27 U37/27 U43/27 U35/27
            XU14/17 ;
CMAPAD14  = U46/16 U34/16 U45/16 U33/16
            U40/16 U39/16 C455/1 XU11/66 ;
BMAPAD12  = U42/17 U38/17 U41/17 U37/17
            U32/17 U31/17 XU11/42 C442/1 ;
AMAPAD16  = U44/17 U36/17 U43/17 U35/17
            U27/17 U26/17 XU11/27 C470/1
            XU2/93 ;
CMAPAD13  = U46/17 U34/17 U45/17 U33/17
            U40/17 U39/17 C456/1 XU11/65 ;
BMAPAD11  = U42/18 U38/18 U41/18 U37/18
            U32/18 U31/18 C443/1 XU11/35 ;
AMAPAD1   = U44/18 U36/18 U43/18 U35/18
            U27/18 U26/18 C471/1 XU2/152
            XU1/104 ;
CMAPAD15  = U46/18 U34/18 U45/18 U33/18
            U40/18 U39/18 C457/1 XU11/83 ;
BMAPAD4   = U42/19 U38/19 U41/19 U37/19
            U32/19 U31/19 C444/1 XU11/106 ;
AMAPAD7   = U44/19 U36/19 U43/19 U35/19
            U27/19 U26/19 C472/1 XU11/102
            XU2/146 ;
CMAPAD5   = U46/19 U34/19 U45/19 U33/19
            U40/19 U39/19 C458/1 XU11/2 ;
BMAPAD14  = U42/20 U38/20 U41/20 U37/20
            U32/20 U31/20 C445/1 XU11/32 ;
'ENAM0    = U32/28 U31/28 C330/1 10P1/3
            XU9/39 ;
AMAPAD8   = U44/20 U36/20 U43/20 U35/20
            U27/20 U26/20 C473/1 XU11/79
            XU2/144 ;
'ENAM1    = U36/28 U35/28 C331/1 10P1/4
            XU9/38 ;
CMAPAD9   = U46/20 U34/20 U45/20 U33/20
            U40/20 U39/20 C459/1 XU11/118 ;
'ENAM2    = U40/28 U39/28 C332/1 10P1/5
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            XU9/37 ;
'ENAM3     = U44/28 U43/28 C333/1 10P1/6
            XU9/36 ;
BMAPAD8    = U42/21 U38/21 U41/21 U37/21
            U32/21 U31/21 C446/1 XU11/7 ;
AMAPAD10   = U44/21 U36/21 U43/21 U35/21
            U27/21 U26/21 C474/1 XU11/104
            XU2/142 ;
CMAPAD10   = U46/21 U34/21 U45/21 U33/21
            U40/21 U39/21 C460/1 XU11/119 ;
BMAPAD5    = U42/29 U38/29 U41/29 U37/29
            U32/29 U31/29 C447/1 XU11/108 ;
AMAPAD12   = U44/29 U36/29 U43/29 U35/29
            U27/29 U26/29 C475/1 XU11/90
            XU2/3 ;
CMAPAD11   = U46/29 U34/29 U45/29 U33/29
            U40/29 U39/29 C461/1 XU11/131 ;
BMAPAD7    = U42/30 U38/30 U41/30 U37/30
            U32/30 U31/30 C448/1 XU11/117 ;
AMAPAD14   = U44/30 U36/30 U43/30 U35/30
            U27/30 U26/30 XU11/95 C476/1
            XU2/149 ;
CMAPAD7    = U46/30 U34/30 U45/30 U33/30
            U40/30 U39/30 C462/1 XU11/14 ;
BMAPAD10   = U42/31 U38/31 U41/31 U37/31
            U32/31 U31/31 C449/1 XU11/124 ;
AMAPAD2    = U44/31 U36/31 U43/31 U35/31
            U27/31 U26/31 C477/1 XU2/18
            XU1/106 ;
CMAPAD0    = U46/31 U34/31 U45/31 U33/31
            U40/31 U39/31 C463/1 XU1/88 ;
BMAPAD1    = U42/32 U38/32 U41/32 U37/32
            U32/32 U31/32 C450/1 XU1/108 ;
AMAPAD4    = U44/32 U36/32 U43/32 U35/32
            U27/32 U26/32 C478/1 XU11/64
            XU2/22 ;
CMAPAD3    = U46/32 U34/32 U45/32 U33/32
            U40/32 U39/32 C464/1 XU11/9 ;
'AMCS0     = U32/5 U31/5 XU1/82 C360/2
            R71/1 ;
'AMCS1     = U36/5 U35/5 XU1/65 C361/2
            R72/1 ;
'AMCS2     = U40/5 U39/5 XU1/159 C362/2
            R73/1 ;
'AMCS3     = U44/5 U43/5 XU1/2 C363/2
            R74/1 ;
'AAMSSWR   = U42/12 U44/12 U36/12 U32/12
            U43/12 U35/12 U31/12 U27/12
            U26/12 R213/1 XU12/142 C487/1 ;
'BAMSSWR   = U46/12 U38/12 U34/12 U45/12
            U41/12 U37/12 U33/12 U40/12
            U39/12 R214/1 XU12/146 C485/1 ;
LKOLL11    = U42/27 U34/27 U40/6 U32/6
            U27/6 XU15/24 ;
LKOHL8     = U46/6 U38/6 U44/6 U36/6
            XU15/22 ;
LKOLL10    = U42/26 U34/26 U40/7 U32/7
            U27/7 XU15/25 ;
LKOHL9     = U46/7 U38/7 U44/7 U36/7
            XU15/17 ;
LKOLL9     = U42/23 U34/23 U40/10 U32/10
            U27/10 XU15/26 ;
LKOHL11    = U46/10 U38/10 U44/10 U36/10
            XU15/9 ;
LKOLL8     = U42/22 U34/22 U40/11 U32/11
            U27/11 XU15/27 ;
LKOHL10    = U46/11 U38/11 U44/11 U36/11
            XU15/8 ;
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LKOLL12   = U42/11 U34/11 U40/22 U32/22
            U27/22 XU18/27 ;
LKOHL12   = U46/22 U38/22 U44/22 U36/22
            XU18/22 ;
LKOLL13   = U42/10 U34/10 U40/23 U32/23
            U27/23 XU18/26 ;
LKOHL13   = U46/23 U38/23 U44/23 U36/23
            XU18/17 ;
LKOLL14   = U42/7 U34/7 U40/26 U32/26
            U27/26 XU18/25 ;
LKOHL15   = U46/26 U38/26 U44/26 U36/26
            XU18/9 ;
LKOLL15   = U42/6 U34/6 U40/27 U32/27
            U27/27 XU18/24 ;
LKOHL14   = U46/27 U38/27 U44/27 U36/27
            XU18/8 ;
'ENAM4    = U34/28 U33/28 C334/1 10P1/7
            XU9/35 ;
'ENAM5    = U38/28 U37/28 C335/1 10P1/8
            XU9/34 ;
'ENAM6    = U42/28 U41/28 C336/1 10P1/9
            XU9/33 ;
'ENAM7    = U46/28 U45/28 C337/1 XU9/40
            10P1/2 ;
'AMCS4    = U34/5 U33/5 XU1/66 C364/2
            R75/1 ;
'AMCS5    = U38/5 U37/5 XU1/83 C365/2
            R76/1 ;
'AMCS6    = U42/5 U41/5 XU1/12 C366/2
            R77/1 ;
'AMCS7    = U46/5 U45/5 XU1/14 C367/2
            R78/1 ;
ADD0      = U30/1 U29/1 U28/1 XU16/33 ;
GDATA16   = U28/6 XU8/2 XU2/43 ;
ADD2      = U30/2 U29/2 U28/2 XU16/29 ;
GDATA15   = U28/7 XU8/3 XU2/83 ;
ADD4      = U30/3 U29/3 U28/3 XU14/15 ;
GDATA19   = U28/10 XU8/7 XU2/48 ;
ADD7      = U30/4 U29/4 U28/4 XU14/29 ;
ADD9      = U30/13 U29/13 U28/13 XU15/16 ;
GDATA20   = U28/22 XU7/4 XU2/50 ;
ADD10     = U30/14 U29/14 U28/14 XU15/30 ;
GDATA6    = U28/23 XU5/44 XU2/42 ;
ADD13     = U30/15 U29/15 U28/15 XU18/16 ;
GDATA13   = U28/26 XU6/43 XU2/65 ;
ADD14     = U30/16 U29/16 U28/16 XU18/30 ;
GDATA14   = U28/27 XU6/7 XU2/66 ;
ADD15     = U30/18 U29/18 U28/18 XU18/29 ;
ADD12     = U30/19 U29/19 U28/19 XU18/15 ;
'ENSS     = C338/1 U27/28 10P1/10 XU9/30
            U26/28 ;
ADD11     = U30/20 U29/20 U28/20 XU15/29 ;
'OEHIT    = C340/1 U30/28 U29/28 U28/28
            R89/2 XU3/4 ;
ADD8      = U30/21 U29/21 U28/21 XU15/15 ;
ADD6      = U30/29 U29/29 U28/29 XU14/30 ;
ADD5      = U30/30 U29/30 U28/30 XU14/16 ;
ADD3      = U30/31 U29/31 U28/31 XU13/30 ;
MRESET    = XU9/1 XU7/1 XU8/1 XU6/1
            XU5/1 XU4/1 XU11/21 XU10/21
            XU3/1 XU2/21 XU17/1 XU16/1
            XU18/1 XU15/1 XU14/1 XU13/1
            XU1/21 XU12/21 R236/1 R474/2 ;
ADD1      = U30/32 U29/32 U28/32 XU16/30 ;
CLK5      = XU9/29 XU9/5 XU18/5 XU15/5
            XU14/5 XU13/5 R291/1 R181/1
            U65/20 ;
'SSCS     = U27/5 U26/5 XU1/79 C368/2
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            R79/1 ;
'HITCS    = C339/1 U30/5 U29/5 U28/5
            R88/2 XU3/39 ;
DNCLK3    = XU9/6 R279/1 R173/1 U66/11 ;
'HITWR    = U30/12 U29/12 U28/12 XU16/34
            C398/1 ;
DNCLK4    = XU9/28 R280/1 R174/1 U66/10 ;
SM1Q0     = XU9/8 XU3/28 XU17/12 XU1/27
            C370/2 ;
READY     = XU9/9 XU3/42 XU17/13 XU1/35
            C371/2 ;
TRAIL     = XU9/11 XU7/3 XU3/2 XU17/14
            XU1/52 C372/2 ;
CLRTAG    = XU9/12 XU3/44 XU2/58 XU17/15
            XU1/53 C373/2 ;
GDATA3    = U29/6 XU4/43 XU2/12 ;
IHOLD     = XU9/13 XU3/20 XU17/16 XU1/149
            C479/2 ;
GDATA8    = U29/7 XU7/42 XU2/119 ;
EE        = XU9/14 XU3/19 XU2/11 XU18/43
            XU15/43 XU14/43 XU13/43 XU1/49
            C354/2 C534/2 ;
GDATA10   = U29/10 XU6/3 XU2/14 ;
NRLE      = XU9/15 XU3/18 XU2/15 XU1/58
            C376/2 ;
LAST1     = XU9/16 R315/2 ;
GDATA5    = U29/22 XU5/2 XU2/27 ;
GDATA17   = U29/23 XU8/44 XU2/91 ;
N2LAST0   = XU9/42 XU11/11 XU3/8 XU17/39
            C391/1 XU1/11 ;
GDATA18   = U29/26 XU8/43 XU2/45 ;
N2LAST1   = XU9/4 XU11/13 XU3/9 XU17/38
            C386/1 XU1/13 ;
GDATA4    = U29/27 XU4/7 XU2/25 ;
N2LAST2   = XU9/3 XU11/15 XU3/11 XU17/37
            C387/1 XU1/15 ;
N2LAST3   = XU9/2 XU11/17 XU3/12 XU17/36
            C388/1 XU1/17 ;
N2LAST4   = XU9/44 XU11/18 XU3/13 XU17/35
            C389/1 XU1/18 ;
N2LAST5   = XU9/43 XU11/19 XU3/14 XU17/34
            C396/1 XU1/19 ;
N2LAST6   = XU9/7 XU11/22 XU3/15 XU17/8
            C397/1 XU1/22 ;
N2LAST7   = XU9/20 XU11/23 XU3/16 XU17/33
            C392/1 XU1/23 ;
N2LAST8   = XU9/19 XU11/24 XU3/38 XU17/30
            C393/1 XU1/24 ;
N2LAST9   = XU9/18 XU11/26 XU3/37 XU17/29
            C394/1 XU1/26 ;
TMOD      = XU9/27 XU7/19 XU8/20 XU6/20
            XU5/20 XU4/20 XU11/78 XU3/43
            XU1/142 XU12/39 C482/1 U94/12 ;
AMSSRD    = XU9/26 XU18/40 XU15/40 XU14/40
            XU13/40 R207/1 XU12/143 C486/1 ;
LAYCN0    = XU9/25 XU14/18 XU18/18 XU15/18
            XU13/18 XU1/16 C377/2 ;
LAYCN1    = XU9/24 XU1/119 C378/2 ;
LAYCN2    = XU9/22 XU1/85 C379/2 ;
GDATA1    = U30/6 XU4/2 XU2/9 ;
GDATA9    = U30/7 XU5/7 XU2/131 ;
GDATA7    = U30/10 XU5/43 XU2/118 ;
GDATA2    = U30/22 XU4/44 XU2/2 ;
GDATA11   = U30/23 XU6/2 XU2/16 ;
GDATA12   = U30/26 XU6/44 XU2/132 ;
GDATA0    = U30/27 XU4/3 XU2/7 ;
CLK2      = XU7/5 XU8/5 XU6/5 XU5/5
            XU4/5 R288/1 R179/1 U65/10 ;
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OUT0      = XU4/34 U19/9 ;
OUT5      = XU5/35 U21/15 ;
OUT10     = XU6/34 U23/1 ;
ROUT      = XU7/40 XU8/40 XU5/40 XU6/40
            XU4/40 R209/1 XU12/102 C483/1 ;
OUT1      = XU4/33 U19/15 ;
DNCLK6    = XU5/6 R282/1 R175/1 U66/14 ;
OUT6      = XU5/34 U21/1 ;
OUT11     = XU6/33 U23/7 ;
ENSPY     = XU7/39 XU8/39 XU5/39 XU6/39
            XU4/39 C355/2 R111/1 XU10/60
            XU11/8 XU1/8 XU12/140 ;
OUT2      = XU4/30 U19/1 ;
OUT7      = XU5/33 U21/7 ;
OUT12     = XU6/30 U20/9 ;
PUSH      = XU7/28 XU8/28 XU5/42 XU6/28
            XU4/28 XU10/11 XU1/47 R270/1
            C353/2 ;
OUT3      = XU4/29 U19/7 ;
OUT9      = XU5/30 U23/15 ;
OUT13     = XU6/29 U20/15 ;
PUSHVME   = XU7/8 XU8/42 XU6/42 XU5/28
            XU4/42 R272/1 XU12/150 C356/1 ;
OUT4      = XU4/6 U21/9 ;
OUT14     = XU6/6 U20/1 ;
EEOUT     = XU7/2 XU8/4 XU5/3 XU6/4
            XU4/4 XU1/9 C358/2 ;
'DS       = R91/2 R271/2 C90/1 U24/7
            U80/9 ;
EERESET   = XU7/18 XU8/19 XU6/19 XU5/19
            XU4/19 XU2/136 XU1/25 C357/2 ;
IVDATA0   = XU4/27 XU10/5 XU2/36 XU13/16
            XU1/147 XU1/34 UB71/16 9P12/3
            XU12/119 ;
IVDATA5   = XU5/8 XU10/59 XU2/38 XU14/12
            XU1/109 UA71/18 9P11/5 ;
IVDATA10  = XU6/27 XU11/156 XU10/47 XU15/13
            UB71/19 9P12/6 ;
IVDATA1   = XU4/26 XU10/53 XU2/44 XU13/38
            XU1/151 XU1/124 UB71/18 9P12/5 ;
IVDATA6   = XU5/9 XU10/58 XU2/39 XU14/13
            XU1/97 UA71/20 9P11/7 ;
IVDATA11  = XU6/26 XU11/154 XU10/44 XU15/14
            UB71/21 9P12/8 ;
IVDATA2   = XU4/8 XU10/52 XU2/47 XU13/37
            XU1/153 XU1/68 UB71/20 9P12/7 ;
IVDATA7   = XU5/11 XU11/62 XU10/56 XU2/52
            XU14/14 UA71/22 9P11/9 ;
IVDATA12  = XU6/8 XU11/152 XU10/146 XU18/11
            UA71/15 9P11/2 ;
IVDATA3   = XU4/9 XU10/39 XU2/49 XU13/36
            XU1/155 XU1/71 UB71/22 9P12/9 ;
IVDATA9   = XU5/12 XU11/4 XU10/49 XU15/12
            UB71/17 9P12/4 ;
IVDATA13  = XU6/9 XU11/148 XU10/148 XU18/12
            UA71/17 9P11/4 ;
IVDATA4   = XU4/11 XU10/38 XU2/54 XU14/11
            XU1/107 UA71/16 9P11/3 ;
IVADD19   = XU7/9 XU8/18 XU6/18 XU4/18
            XU5/18 XU1/45 XU12/108 ;
IVDATA14  = XU6/11 XU11/146 XU10/152 XU18/13
            UA71/19 9P11/6 ;
OSPY5     = XU5/13 U58/27 ;
OSPY0     = XU4/12 U58/11 ;
OSPY6     = XU5/14 U58/26 ;
OSPY10    = XU6/12 U59/6 ;
OSPY1     = XU4/13 U58/10 ;
OSPY7     = XU5/38 U58/23 ;
```

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OSPY11    = XU6/13 U59/27 ;
OSPY2     = XU4/14 U58/7 ;
OSPY9     = XU5/37 U59/10 ;
OSPY12    = XU6/14 U59/26 ;
OSPY3     = XU4/15 U58/6 ;
OSPY13    = XU6/15 U59/23 ;
OSPY4     = XU4/16 U58/22 ;
OSPY14    = XU6/16 U59/22 ;
OUT15     = XU8/34 U20/7 ;
OUT16     = XU8/33 U22/9 ;
OUT8      = XU7/12 U23/9 ;
OUT17     = XU8/30 U22/15 ;
OUT20     = XU7/30 U24/9 ;
OUT18     = XU8/29 U22/1 ;
OUT21     = XU7/29 U24/15 ;
OUT19     = XU8/6 U22/7 ;
OUT22     = XU7/6 U24/1 ;
IVDATA15  = XU8/27 XU11/144 XU10/154 XU18/14
            UA71/21 9P11/8 ;
IVDATA16  = XU8/26 XU11/143 XU10/156 UB72/15
            9P14/2 ;
IVDATA17  = XU8/8 XU11/142 XU10/4 UB72/16
            9P14/3 ;
IVDATA18  = XU8/9 XU11/58 XU10/36 UB72/17
            9P14/4 ;
IVDATA8   = XU7/27 XU11/63 XU10/54 XU15/11
            UB71/15 9P12/2 ;
IVDATA19  = XU8/11 XU11/59 UB72/18 9P14/5 ;
IVDATA20  = XU7/26 XU11/60 UB72/19 9P14/6 ;
IVDATA21  = XU7/13 XU1/59 UB72/20 9P14/7 ;
OSPY15    = XU8/12 U59/11 ;
IVDATA22  = XU7/14 XU1/60 UB72/21 9P14/8 ;
OSPY16    = XU8/13 U60/23 ;
OSPY17    = XU8/14 U60/27 ;
OSPY8     = XU7/35 U59/7 ;
OSPY18    = XU8/15 U60/6 ;
OSPY20    = XU7/15 U60/10 ;
OSPY19    = XU8/16 U60/7 ;
OSPY21    = XU7/16 U60/11 ;
OSPY22    = XU7/34 U60/26 ;
SPYADD0   = U63/32 U57/1 U62/32 U56/1
            U61/32 U55/1 XU10/85 ;
HRSPY14   = U61/27 U55/6 XU11/39 ;
OSPYAD5   = U60/1 U59/1 U58/1 XU10/95 ;
SPYADD10  = U63/31 U57/2 U62/31 U56/2
            U61/31 U55/2 XU10/25 ;
HRSPY15   = U61/26 U55/7 XU11/52 ;
OSPYAD10  = U60/2 U59/2 U58/2 XU10/90 ;
SPYADD16  = U63/30 U57/3 U62/30 U56/3
            U61/30 U55/3 XU10/77 ;
HRSPY10   = U61/23 U55/10 XU11/49 ;
OSPYAD2   = U60/3 U59/3 U58/3 XU10/111 ;
SPYADD3   = U63/29 U57/4 U62/29 U56/4
            U61/29 U55/4 XU10/65 ;
HRSPY9    = U61/22 U55/11 XU11/47 ;
OSPYAD4   = U60/4 U59/4 U58/4 XU10/106 ;
SPYADD11  = U63/20 U57/13 U62/20 U56/13
            U61/20 U55/13 XU10/2 ;
OSPYAD8   = U60/13 U59/13 U58/13 XU10/32 ;
SPYADD6   = U63/19 U57/14 U62/19 U56/14
            U61/19 U55/14 XU10/119 ;
HRSPY12   = U61/10 U55/23 XU11/56 ;
OSPYAD11  = U60/14 U59/14 U58/14 XU10/16 ;
SPYADD4   = U63/18 U57/15 U62/18 U56/15
            U61/18 U55/15 XU10/132 ;
HRSPY11   = U61/7 U55/26 XU11/54 ;
OSPYAD13  = U60/15 U59/15 U58/15 XU10/12 ;
SPYADD13  = U63/17 U57/16 U62/17 U56/16
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            U61/17 U55/16 XU10/9 ;
HRSPY16   = U61/6 U55/27 XU11/53 ;
OSPYAD1   = U60/16 U59/16 U58/16 XU10/117 ;
SPYADD14  = U63/16 U57/17 U62/16 U56/17
            U61/16 U55/17 XU10/7 ;
OSPYAD15  = U60/17 U59/17 U58/17 XU10/103 ;
SPYADD5   = U63/15 U57/18 U62/15 U56/18
            U61/15 U55/18 XU10/131 ;
OSPYAD14  = U60/18 U59/18 U58/18 XU10/8 ;
SPYADD15  = U63/14 U57/19 U62/14 U56/19
            U61/14 U55/19 XU10/102 ;
OSPYAD12  = U60/19 U59/19 U58/19 XU10/14 ;
SPYADD7   = U63/13 U57/20 U62/13 U56/20
            U61/13 U55/20 XU10/118 ;
'HSPYBFR  = U57/28 U56/28 U55/28 R205/1
            XU12/148 ;
'RSPYBFR  = U63/28 U62/28 U61/28 R206/1
            XU12/156 ;
OSPYAD0   = U60/20 U59/20 U58/20 XU10/29 ;
'OSPYBFR  = U60/28 U59/28 U58/28 R204/1
            XU12/52 ;
SPYADD12  = U63/21 U57/21 U62/21 U56/21
            U61/21 U55/21 XU10/159 ;
OSPYAD9   = U60/21 U59/21 U58/21 XU10/34 ;
SPYADD8   = U63/4 U57/29 U62/4 U56/29
            U61/4 U55/29 XU10/42 ;
OSPYAD3   = U60/29 U59/29 U58/29 XU10/108 ;
SPYADD2   = U63/3 U57/30 U62/3 U56/30
            U61/3 U55/30 XU10/66 ;
OSPYAD6   = U60/30 U59/30 U58/30 XU10/104 ;
SPYADD1   = U63/2 U57/31 U62/2 U56/31
            U61/2 U55/31 XU10/83 ;
OSPYAD7   = U60/31 U59/31 U58/31 XU10/92 ;
SPYADD9   = U63/1 U57/32 U62/1 U56/32
            U61/1 U55/32 XU10/27 ;
OSPYAD16  = U60/32 U59/32 U58/32 XU10/82 ;
'HSPYCS   = U57/5 U56/5 U55/5 C381/2
            R344/1 XU10/37 ;
'RSPYCS   = U63/5 U62/5 U61/5 C382/2
            R345/1 XU10/79 ;
'OSPYCS   = U60/5 U59/5 U58/5 C383/2
            R346/1 XU10/144 ;
'HSPYWE   = U57/12 U56/12 C344/1 U55/12
            XU10/149 ;
'RSPYWE   = U63/12 U62/12 C345/1 U61/12
            XU10/3 ;
'OSPYWE   = U60/12 C346/1 U59/12 U58/12
            XU10/150 ;
HRSPY21   = U62/27 U56/6 XU1/143 ;
HRSPY18   = U62/26 U56/7 XU11/3 ;
HRSPY19   = U62/23 U56/10 XU11/150 ;
HRSPY17   = U62/22 U56/11 XU11/5 ;
HRSPY8    = U62/11 U56/22 XU11/44 ;
HRSPY13   = U62/10 U56/23 XU11/38 ;
HRSPY20   = U62/7 U56/26 XU11/149 ;
HRSPY7    = U62/6 U56/27 XU11/36 ;
HRSPY22   = U63/27 U57/6 XU1/36 ;
HRSPY2    = U63/26 U57/7 XU1/154 ;
HRSPY1    = U63/23 U57/10 XU1/156 ;
HRSPY0    = U63/22 U57/11 XU1/4 ;
HRSPY6    = U63/11 U57/22 XU1/144 ;
HRSPY5    = U63/10 U57/23 XU1/146 ;
HRSPY3    = U63/7 U57/26 XU1/152 ;
HRSPY4    = U63/6 U57/27 XU1/148 ;
NCLK2     = XU10/33 XU10/13 R300/1 R186/1
            U67/14 ;
DNCLK8    = XU10/15 R284/1 R177/1 U66/19 ;
CLK4      = XU10/35 R290/1 R180/1 U65/14 ;
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SPYREGR   = XU10/6 R212/1 R468/2 ;
IVADD16   = XU11/153 XU10/26 XU12/122 ;
IVADD15   = XU11/151 XU10/28 XU12/124 U73/1 ;
IVADD14   = XU11/147 XU10/30 XU1/130 XU12/7
            U73/27 ;
IVADD13   = XU11/130 XU10/142 XU12/9 U73/26 ;
CLK7      = XU11/33 U18/5 U17/5 R293/1
            R183/1 U65/24 ;
IVADD12   = XU11/75 XU10/74 XU12/159 U73/2 ;
IVADD11   = XU11/73 XU10/76 XU12/2 U73/23 ;
IVADD10   = XU11/71 XU10/78 XU12/6 U73/21 ;
IVADD9    = XU11/68 XU10/84 XU12/8 U73/24 ;
IVADD8    = XU11/101 XU10/87 XU12/12 U73/25 ;
IVADD7    = XU11/98 XU10/89 XU12/14 U73/3 ;
IVADD6    = XU11/140 XU10/91 XU12/16 U73/4 ;
IVADD5    = XU11/139 XU10/93 XU12/65 U73/5 ;
IVADD4    = XU11/138 XU10/96 XU2/115 XU12/66
            U73/6 ;
IVADD3    = XU11/135 XU10/43 XU12/131 U73/7 ;
IVADD2    = XU10/45 XU1/37 XU12/132 U73/8 ;
IVADD1    = XU10/48 XU1/29 XU12/25 U73/9 ;
IVADD0    = XU10/50 XU1/32 XU12/27 U73/10 ;
FRZVME    = XU10/69 XU12/139 ;
'WR       = XU10/18 XU11/74 XU1/39 R86/2
            C328/1 U18/2 U17/2 ;
'FREEZE   = XU10/57 U88/3 ;
INIT      = XU11/76 XU2/56 XU16/9 XU18/42
            XU15/42 XU14/42 XU13/42 XU1/30
            R208/1 XU12/34 C480/1 U96/4
            U14/4 ;
FLE       = XU10/17 R314/2 ;
PREFLE0   = XU11/28 XU1/105 ;
PREFLE1   = XU11/30 XU1/7 ;
HSPYREGW  = XU10/67 XU12/58 ;
FFSPYRD   = XU11/6 R211/1 R462/2 ;
RSPYREGW  = XU10/22 XU12/47 ;
OSPYREGW  = XU10/24 XU12/56 ;
HRFQ3     = XU11/89 XU1/67 U17/41 U15/41 ;
HRFQ4     = XU11/91 XU1/57 U17/46 U15/46 ;
HSPYVME   = XU10/55 R466/2 ;
HRFQ5     = XU11/93 XU1/69 U17/44 U15/44 ;
RSPYVME   = XU10/19 R465/2 ;
HRFQ6     = XU11/96 XU1/72 U17/49 U15/49 ;
OSPYVME   = XU10/23 R467/2 ;
HRFQ7     = XU11/43 U17/47 U15/47 ;
HRFQ8     = XU11/45 U17/52 U15/52 ;
HRFQ9     = XU11/48 U17/50 U15/50 ;
HRFQ10    = XU11/50 U17/55 U15/55 ;
HRFQ11    = XU11/55 U17/53 U15/53 ;
HRFQ12    = XU11/67 U18/39 U16/39 ;
HRFQ13    = XU11/57 U18/38 U16/38 ;
HRFQ14    = XU11/69 U18/42 U16/42 ;
HRFQ15    = XU11/72 U18/41 U16/41 ;
HRFQ16    = XU11/126 U18/46 U16/46 ;
HRFQ17    = XU11/134 XU1/131 U18/44 U16/44 ;
HRFQ18    = XU11/136 XU1/132 U18/49 U16/49 ;
HRFQ19    = XU11/115 XU1/126 U18/47 U16/47 ;
HRFQ20    = XU11/113 XU1/134 U18/52 U16/52 ;
IFREEZE   = XU10/143 XU12/135 ;
IVADD17   = XU11/84 XU1/96 XU12/117 ;
IVADD18   = XU11/87 XU1/43 XU12/111 ;
CLK6      = XU3/5 XU2/33 XU16/5 XU17/5
            R292/1 R182/1 U65/19 ;
NCLK4     = XU2/35 R302/1 R188/1 U67/19 ;
OEMLD     = R275/2 R90/2 XU2/6 ;
RREG0     = XU2/8 R451/2 ;
EP        = XU2/13 R317/2 ;
HLE       = XU3/7 XU2/17 XU18/19 XU15/19
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            XU14/19 XU13/19 XU1/56 C375/2
            C532/2 ;
DNCLK2    = XU3/6 R278/1 R172/1 U64/10 ;
MIS0      = XU2/59 XU1/62 ;
MIS1      = XU2/60 XU1/102 ;
MIS2      = XU2/4 XU1/103 ;
MIS3      = XU2/156 XU1/63 ;
'ERRLINE  = XU2/126 U94/4 U81/1 U86/20 ;
'ICDF_ER  = XU2/123 XU12/71 ;
INVADD0   = XU2/24 XU13/44 ;
INVADD1   = XU2/26 XU14/44 ;
INVADD2   = XU2/28 XU15/44 ;
INVADD3   = XU2/30 XU18/44 ;
LEP       = XU2/96 XU18/7 XU15/7 XU14/7
            XU13/7 XU1/77 C369/2 C533/2 ;
RLEDEL    = XU2/55 XU13/29 ;
'HFF      = XU2/67 XU1/78 R66/2 ;
'RFF      = XU2/57 XU1/84 R63/2 ;
WREG0     = XU2/69 R452/2 ;
HOVRFLW   = XU2/72 XU16/40 ;
HITWEDEL  = XU2/134 XU16/8 C535/1 C489/1
            XU18/28 XU15/28 XU14/28 XU13/28 ;
'WERREN   = XU2/159 R313/1 R461/2 ;
SS0       = XU17/27 XU16/16 C425/1 XU13/35 ;
SS1       = XU17/26 XU16/27 C426/1 XU13/34 ;
SS2       = XU17/25 XU16/26 C427/1 XU13/4 ;
NCLK3     = XU18/6 XU15/6 XU14/6 XU13/6
            R301/1 R187/1 U67/20 ;
IHITWE0   = XU16/12 XU13/33 ;
IHITWE1   = XU16/13 XU14/33 ;
IHITWE2   = XU16/14 XU15/33 ;
IHITWE3   = XU16/15 XU18/33 ;
RLE       = XU17/6 C395/1 XU18/20 XU15/20
            XU14/20 XU13/20 ;
AMSSWR    = XU18/39 XU15/39 XU14/39 XU13/39
            R276/1 XU12/144 C484/1 ;
EMPTY     = XU17/40 C390/1 XU1/28 ;
DNCLK9    = XU16/11 R285/1 R178/1 U66/24 ;
'RPOK     = XU17/11 R316/2 ;
NCLK6     = XU16/6 R304/1 R190/1 U67/23 ;
HITCN0    = XU17/20 XU16/25 XU1/90 ;
HITCN1    = XU17/19 XU16/24 XU1/92 ;
HITCN2    = XU17/18 XU16/22 XU1/95 ;
CLK8      = XU1/33 U16/5 U15/5 R294/1
            R184/1 U65/23 ;
'HEF0     = XU1/74 R65/2 ;
'HEF1     = XU1/158 R490/2 ;
'REF0     = XU1/76 R62/2 ;
'REF1     = XU1/129 R491/2 ;
'HR       = XU1/38 R87/2 C26/1 U18/4
            U17/4 ;
'RR       = XU1/5 R84/2 C24/1 U16/4
            U15/4 ;
'RD       = XU1/44 R85/2 C329/1 U16/2
            U15/2 ;
HOLD      = XU1/135 R96/1 U91/6 U80/2 ;
HREVME    = XU1/101 R445/2 ;
RREVME    = XU1/98 R447/2 ;
'SSVME    = XU1/75 R455/2 ;
'AMVME    = XU1/73 R456/2 ;
HBCTRVEN  = XU1/6 R210/1 R450/2 ;
'RHF      = XU1/89 R64/2 C15/1 U98/1 ;
'HHF      = XU1/87 R67/2 C13/1 U13/1 ;
HOEVME    = XU1/139 R446/2 ;
ROEVME    = XU1/140 R444/2 ;
IVDATA31  = XU1/112 UA72/22 9P13/9 U73/19 ;
HRFQ0     = XU1/48 U17/39 U15/39 ;
HRFQ1     = XU1/50 U17/38 U15/38 ;
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HRFQ2     = XU1/55 U17/42 U15/42 ;
RDSWEN    = XU1/133 XU12/73 ;
HRFQ21    = XU1/91 U18/50 U16/50 ;
HRFQ22    = XU1/93 U18/53 U16/53 ;
IVDATA24  = UA72/15 9P13/2 U73/11 ;
IVDATA25  = UA72/16 9P13/3 U73/12 ;
IVDATA26  = UA72/17 9P13/4 U73/13 ;
IVDATA27  = UA72/18 9P13/5 U73/15 ;
IVDATA28  = UA72/19 9P13/6 U73/16 ;
IVA1      = XU12/98 U87/22 ;
IVDATA29  = UA72/20 9P13/7 U73/17 ;
IVA2      = XU12/97 U87/16 ;
IVDATA30  = UA72/21 9P13/8 U73/18 ;
IVA3      = XU12/95 U87/12 ;
IVA4      = XU12/92 U87/8 ;
IVA5      = XU12/90 U87/3 ;
IVA6      = XU12/82 U90/22 ;
IVA7      = XU12/79 U90/19 ;
IVA8      = XU12/57 U87/19 ;
IVA9      = XU12/67 U87/14 ;
IVA10     = XU12/55 U87/11 ;
IVA11     = XU12/50 U87/6 ;
IVA12     = XU12/48 U87/2 ;
IVA13     = XU12/45 U90/23 ;
'IDPRMRD  = R203/1 R449/2 U73/20 ;
IVA14     = XU12/43 U90/20 ;
IVA15     = XU12/96 U90/16 ;
IVA16     = XU12/93 U90/11 ;
IVA17     = XU12/91 U90/8 ;
IVADD20   = XU12/106 PAD269/1 ;
IVA18     = XU12/89 U90/5 ;
IVADD21   = XU12/104 PAD270/1 ;
IVA19     = XU12/87 U90/2 ;
IVD7      = UA71/3 U84/23 ;
IVA20     = XU12/84 U89/20 ;
IVAS      = XU12/42 XU12/17 C488/1 U89/23 ;
IVD15     = UA71/4 U84/22 ;
IVA21     = XU12/78 U89/17 ;
IVD6      = UA71/5 U84/20 ;
IVA22     = XU12/76 U89/11 ;
IVD14     = UA71/6 U84/19 ;
IVA23     = XU12/74 U89/9 ;
IVD5      = UA71/7 U84/17 ;
IVA24     = XU12/30 U88/2 ;
IVD13     = UA71/8 U84/16 ;
IVA25     = XU12/28 U88/5 ;
IVD4      = UA71/9 U84/14 ;
IVA26     = XU12/26 U88/8 ;
IVD12     = UA71/10 U84/13 ;
IVA27     = XU12/24 U88/11 ;
IVA28     = XU12/23 U88/13 ;
'DWOE     = UB72/13 R200/1 UA72/13 XU12/32
            UB71/13 UA71/13 U85/24 U85/1
            U84/24 U84/1 ;
IVA29     = XU12/22 U88/16 ;
IVA30     = XU12/19 U88/19 ;
IVA31     = XU12/18 U88/22 ;
'DROE     = UB72/2 R201/1 UA72/2 XU12/29
            UB71/2 UA71/2 ;
'DTACKIN  = UB72/1 UA72/1 XU12/38 UB71/1
            C348/1 UA71/1 ;
'GA0      = S2/10 6P5/2 XU12/86 P1/D10 ;
'GA1      = S2/9 6P5/3 XU12/64 P1/D11 ;
IVD3      = UB71/3 U84/12 ;
'GA2      = S2/8 6P5/4 XU12/63 P1/D13 ;
'RESFIFO  = C481/1 XU12/103 U18/1 U16/1
            U17/1 U15/1 ;
IVD11     = UB71/4 U84/11 ;
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'GA3      = S2/7 6P5/5 XU12/62 P1/D15 ;
IVD2      = UB71/5 U84/9 ;
'GA4      = S2/6 6P5/6 XU12/101 P1/D17 ;
IVD10     = UB71/6 U84/8 ;
IVD1      = UB71/7 U84/6 ;
IVAM0     = XU12/115 U89/13 ;
IVD9      = UB71/8 U84/5 ;
IVAM1     = XU12/136 U89/16 ;
IVD0      = UB71/9 U84/3 ;
IVAM2     = XU12/134 U89/22 ;
IVD8      = UB71/10 U84/2 ;
IVAM3     = XU12/126 U90/3 ;
IVAM4     = XU12/72 U90/14 ;
IVAM5     = XU12/69 U89/6 ;
IVDS0     = XU12/15 U89/5 ;
IVDS1     = XU12/13 U89/2 ;
IVWRITE   = XU12/11 U89/8 ;
IVLWORD   = XU12/113 U89/3 ;
IVIACK    = XU12/138 U90/6 ;
'DTACKE   = R202/1 R360/2 U93/1 U86/24 ;
IVD31     = UA72/3 U85/23 ;
IVD30     = UA72/4 U85/22 ;
'DOE      = R473/1 XU12/88 U85/25 U84/25 ;
IVD29     = UA72/5 U85/20 ;
IVD28     = UA72/6 U85/19 ;
IVD27     = UA72/7 U85/17 ;
IVD26     = UA72/8 U85/16 ;
CLK10     = XU12/33 R296/1 R185/1 U67/10 ;
IVD25     = UA72/9 U85/14 ;
IVD24     = UA72/10 U85/13 ;
'BPINIT   = U95/12 U95/3 U88/6 ;
'CDFERR   = XU12/68 U94/2 U81/9 U86/29 ;
IVD23     = UB72/3 U85/12 ;
IVDATA23  = UB72/22 9P14/9 ;
IVD22     = UB72/4 U85/11 ;
IVD21     = UB72/5 U85/9 ;
IVD20     = UB72/6 U85/8 ;
IVD19     = UB72/7 U85/6 ;
IVD18     = UB72/8 U85/5 ;
IVD17     = UB72/9 U85/3 ;
IVD16     = UB72/10 U85/2 ;
RFIFO1    = U15/26 U1/11 ;
HFIFO1    = U17/26 U3/11 ;
RFIFO0    = U15/25 U1/13 ;
HFIFO0    = U17/25 U3/13 ;
RFIFO3    = U15/24 U1/3 ;
HFIFO3    = U17/24 U3/3 ;
RFIFO2    = U15/23 U1/5 ;
HFIFO2    = U17/23 U3/5 ;
RFIFO5    = U15/22 U8/11 ;
HFIFO5    = U17/22 U6/11 ;
RFIFO4    = U15/21 U8/13 ;
HFIFO4    = U17/21 U6/13 ;
RFIFO7    = U15/20 U8/3 ;
HFIFO7    = U17/20 U6/3 ;
RFIFO6    = U15/19 U8/5 ;
HFIFO6    = U17/19 U6/5 ;
RFIFO9    = U15/17 U9/11 ;
HFIFO9    = U17/17 U11/11 ;
RFIFO8    = U15/15 U9/13 ;
HFIFO8    = U17/15 U11/13 ;
RFIFO11   = U15/14 U9/3 ;
HFIFO11   = U17/14 U11/3 ;
RFIFO10   = U15/13 U9/5 ;
HFIFO10   = U17/13 U11/5 ;
'RDS      = C23/1 U16/29 U14/5 U15/29
            U14/12 R11/2 ;
'HDS      = C25/1 U18/29 U96/5 U17/29
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            U96/12 R12/2 ;
RFIFO13   = U16/26 U2/11 ;
HFIFO13   = U18/26 U4/11 ;
RFIFO12   = U16/25 U2/13 ;
HFIFO12   = U18/25 U4/13 ;
RFIFO15   = U16/24 U2/3 ;
HFIFO15   = U18/24 U4/3 ;
RFIFO14   = U16/23 U2/5 ;
HFIFO14   = U18/23 U4/5 ;
RFIFO17   = U16/22 U5/11 ;
HFIFO17   = U18/22 U7/11 ;
RFIFO16   = U16/21 U5/13 ;
HFIFO16   = U18/21 U7/13 ;
RFIFO19   = U16/20 U5/3 ;
HFIFO19   = U18/20 U7/3 ;
RFIFO18   = U16/19 U5/5 ;
HFIFO18   = U18/19 U7/5 ;
RFIFO21   = U16/17 U10/11 ;
HFIFO21   = U18/17 U12/11 ;
RFIFO20   = U16/15 U10/13 ;
HFIFO20   = U18/15 U12/13 ;
RFIFO22   = U16/14 U10/5 ;
HFIFO22   = U18/14 U12/5 ;
'RHFLED   = R309/2 U97/4 U79/1 ;
'HHFLED   = R310/2 U82/4 U78/1 ;
'RDSL     = U14/11 U79/9 ;
'HDSL     = U96/11 U78/9 ;
XVCC      = R298/2 R297/2 R295/2 R289/2
            U68/14 U68/11 C206/1 R281/2
            R277/2 L2/2 C494/1 C493/1
            JP31/1 JP30/1 JP29/1 C216/1
            C218/1 C220/1 C219/1 JP28/1
            JP27/1 JP26/1 C208/1 C210/1
            C212/1 C211/1 JP25/1 JP24/1
            JP23/1 U67/6 U67/7 JP22/1
            JP21/1 JP20/1 JP19/1 JP16/1
            JP13/1 U66/2 U66/8 U66/9
            U66/16 U66/18 U66/25 U67/2
            U67/8 U67/9 U67/16 U67/18
            U67/25 JP18/1 JP15/1 JP12/1
            C197/1 C199/1 C202/1 C201/1
            C189/1 C192/1 C194/1 C193/1
            JP17/1 JP14/1 JP11/1 JP10/1
            JP7/1 JP4/1 U64/6 U64/7
            JP9/1 JP6/1 JP3/1 JP8/1
            JP5/1 JP2/1 U65/2 U65/8
            U65/9 U65/16 U65/18 U65/25
            U64/2 U64/8 U64/9 U64/16
            U64/18 U64/25 ;
CLK3      = R289/1 R192/1 U65/15 U65/17 ;
DNCLK     = R277/1 R193/1 U66/1 U64/11 ;
CLK1      = J6/1 R287/1 R194/1 U65/11 ;
DCLK      = U64/20 ;
DCLK2     = U64/19 ;
DCLK3     = U64/24 ;
DCLK4     = U64/23 ;
CLK9      = R295/1 R196/1 U67/11 U67/17 ;
DNCLK5    = R281/1 R197/1 U66/15 U66/17 ;
NCLK1     = J4/1 R299/1 R195/1 U67/15 ;
DNCLK7    = J5/1 R283/1 R176/1 U66/20 ;
NCLK5     = U67/24 ;
DNCLK10   = U66/23 ;
+5VCONN   = P2/B32 P1/B32 P2/B13 P2/B1
            P1/C32 P1/A32 C349/1 L1/1
            C271/1 P0/D1 P0/E1 P0/B1
            P0/C1 P0/C2 P0/A1 ;
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