REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

DEL1.10

I298 AMZ-DELAY
IN
OUT20
OUT40
OUT60
OUT80
OUT100
RHOMBUS

CONTRACLK-D
BUF-M-INPUTD
BUF-CLK-D
PROGRAM-D
DONE-D
INIT-D
DIN-D
BUF-WRITE-D
CE-D
BUF-TRIG-D
INPUT-TRIG-D
TMS-B
TCK-B

R4.10 R3.10 R2.10 R1.10 VCC_2V5 GND

R603
J1.10
I22

J2.10
SAMTEC-SFMC-107
I265

LED
8XLOCK
3XCONTROL

LAENGE AN JD-BUS ANPASSEN
(JET-FPGA)

R5.10
D-WR-STRB
D-CE
D-WR

TTC-DAT0(0)
TTC-DAT1(0)
TTC-DAT2(0)
TTC-DAT3(0)
TTC-DAT4(0)
TTC-DAT5(0)
TTC-DAT6(0)
TTC-DAT7(0)

D-DAQ1
D-DAQ2
D-ROC1
D-ROC2

D-RDO(11..0)
C-RDO(11..0)

R-SIL4.10
I148
VSSR_SSOP20

80MHZ

JB3 JB4
B-JD1(0..4)
B-JD2(0..4)
B-JD3(0..4)
B-JD4(0..4)
R-SIL4.10 I149
R-SIL5.10 I145
J-JD1(0..4)
J-JD2(0..4)
J-JD3(0..4)
J-JD4(0..4)

FOR VERTEX-E (VREF)

VIRTEX 2.5V

XCV150-456

INPUT-FPGA

D

I144

IC1.10

VCCINT=VCC_2V5

VCCO_B0=VCC_2V5
VCCO_B1=VCC_2V5
VCCO_B2=VCC_2V5
VCCO_B3=VCC_2V5
VCCO_B4=VCC_2V5
VCCO_B5=VCC_2V5
VCCO_B6=VCC_2V5
VCCO_B7=VCC_2V5

GND

I/O223 AA22 CCK0
I/O222 AB15 CCK1
I/O221 AA20 CCK2
I/O220 AA15 CCK3
I/O219 AB20 A22
I/O218 AB17 A21
I/O217 AA19 A20
I/O216 AA17 A19
I/O215 AB19 A18
I/O214 AB16 A17
I/O213 Y18 A16
I/O212 A17 A15
I/O211 C18 A14
I/O210 F20 A13
I/O209 A16 A12
I/O208 F12 A11
I/O207 E20 A10
I/O206 E16 A9
I/O205 D21 A8
I/O204 E22 A7
I/O203 F19 A6
I/O202 U20 A5
I/O201 F18 A4
I/O200 D17 A3
I/O199 C17 A2
I/O198 D16 A1
I/O197 C16 A0
I/O196 D15 M1
I/O195 C15 M2
I/O194 D14 CSI_B
I/O193 C14 RDWR_B
I/O192 D12 BUSY/DOUT
I/O191 D11 D0
I/O190 E12 D1
I/O189 E11 D2
I/O188 C12 D3
I/O187 E8 D4
I/O186 A8 D5
I/O185 B13 D6
I/O184 B12 D7
I/O183 E15 WRITE
I/O182 A10 CS*
I/O181 B14 TDI
I/O180 A9 TDO
I/O179 B10 TMS
I/O178 B9 TCK
I/O177 A15 DXN
I/O176 B11 DXP
I/O175 Y9
I/O174 AB9
I/O173 Y14
I/O172 AB13
I/O171 AA15
I/O170 AB11
I/O169 AA14
I/O168 AB10
I/O167 AA12
I/O166 Y10
I/O165 AB15
I/O164 L17
I/O163 L18
I/O162 L20
I/O161 J19
I/O160 T19
I/O159 T20
I/O158 H19
I/O157 H18
I/O156 G20
I/O155 G19
I/O154 T18
I/O153 T19
I/O152 R18
I/O151 R19
I/O150 P18
I/O149 P19
I/O148 N18
I/O147 N19
I/O146 M18
I/O145 M19
I/O144 E21
I/O143 F22
I/O142 F21
I/O141 G21
I/O140 J21
I/O139 J22
I/O138 K21
I/O137 K22
I/O136 L21
I/O135 L22
I/O134 M20
I/O133 M22
I/O132 N20
I/O131 N21
I/O130 P21
I/O129 P20
I/O128 T21
I/O127 U22
I/O126 U21
I/O125 V22
I/O124 D13
I/O123 D10
I/O122 C22
I/O121 C19
I/O120 A7
I/O119 C13
I/O118 C10
I/O117 B19
I/O116 D22
I/O115 A19
I/O114 B18
I/O113 E15
I/O112 E14

I/O00 Y2 ID4E(0)
I/O01 W3 ID4E(1)
I/O02 AB3 ID4E(2)
I/O03 AA4 ID4E(3)
I/O04 AB4 ID4E(4)
I/O05 AA5 ID4E(5)
I/O06 AB5 ID4E(6)
I/O07 AA6 ID4E(7)
I/O08 AB6 ID4E(8)
I/O09 AA7 ID4E(9)
I/O010 Y7 ID4E_RCLK
I/O011 AA8 ID4E_LOCK
I/O012 W14 ID4E_PWRDN
I/O013 W14 ID4E_REN
I/O014 P2 ID3E(0)
I/O015 R1 ID3E(1)
I/O016 R2 ID3E(2)
I/O017 T1 ID3E(3)
I/O018 T2 ID3E(4)
I/O019 U1 ID3E(5)
I/O020 U2 ID3E(6)
I/O021 V1 ID3E(7)
I/O022 V2 ID3E(8)
I/O023 W1 ID3E(9)
I/O024 W2 ID3E_RCLK
I/O025 Y1 ID3E_LOCK
I/O026 V12 ID3E_PWRDN
I/O027 U12 ID3E_REN
I/O028 G1 ID2E(0)
I/O029 H2 ID2E(1)
I/O030 H1 ID2E(2)
I/O031 J2 ID2E(3)
I/O032 J1 ID2E(4)
I/O033 K1 ID2E(5)
I/O034 K3 ID2E(6)
I/O035 L1 ID2E(7)
I/O036 L3 ID2E(8)
I/O037 M1 ID2E(9)
I/O038 M3 ID2E_RCLK
I/O039 N2 ID2E_LOCK
I/O040 Y13 ID2E_PWRDN
I/O041 V13 ID2E_REN
I/O042 E4 ID1E(0)
I/O043 A4 ID1E(1)
I/O044 A3 ID1E(2)
I/O045 B3 ID1E(3)
I/O046 B1 ID1E(4)
I/O047 C1 ID1E(5)
I/O048 D2 ID1E(6)
I/O049 E2 ID1E(7)
I/O050 E1 ID1E(8)
I/O051 F2 ID1E(9)
I/O052 F1 ID1E_RCLK
I/O053 G3 ID1E_LOCK
I/O054 V11 ID1E_PWRDN
I/O055 U11 ID1E_REN
I/O056 W9 ID4H(0)
I/O057 Y8 ID4H(1)
I/O058 V9 ID4H(2)
I/O059 W8 ID4H(3)
I/O060 V8 ID4H(4)
I/O061 W7 ID4H(5)
I/O062 V7 ID4H(6)
I/O063 Y6 ID4H(7)
I/O064 W5 ID4H(8)
I/O065 V5 ID4H(9)
I/O066 W10 ID4H_RCLK
I/O067 V10 ID4H_LOCK
I/O068 E9 ID4H_PWRDN
I/O069 E10 ID4H_REN
I/O070 U4 ID3H(0)
I/O071 T3 ID3H(1)
I/O072 T4 ID3H(2)
I/O073 T5 ID3H(3)
I/O074 R4 ID3H(4)
I/O075 R5 ID3H(5)
I/O076 P3 ID3H(6)
I/O077 P4 ID3H(7)
I/O078 N3 ID3H(8)
I/O079 N4 ID3H(9)
I/O080 V3 ID3H_RCLK
I/O081 V4 ID3H_LOCK
I/O082 E7 ID3H_PWRDN
I/O083 D8 ID3H_REN
I/O084 M6 ID2H(0)
I/O085 L4 ID2H(1)
I/O086 L5 ID2H(2)
I/O087 K4 ID2H(3)
I/O088 K5 ID2H(4)
I/O089 J5 ID2H(5)
I/O090 L6 ID2H(6)
I/O091 H3 ID2H(7)
I/O092 H4 ID2H(8)
I/O093 G4 ID2H(9)
I/O094 N5 ID2H_RCLK
I/O095 M5 ID2H_LOCK
I/O096 E8 ID2H_PWRDN
I/O097 D9 ID2H_REN
I/O098 F3 ID1H(0)
I/O099 F4 ID1H(1)
I/O0100 F5 ID1H(2)
I/O0101 E3 ID1H(3)
I/O0102 E4 ID1H(4)
I/O0103 E6 ID1H(5)
I/O0104 D5 ID1H(6)
I/O0105 D6 ID1H(7)
I/O0106 C5 ID1H(8)
I/O0107 C6 ID1H(9)
I/O0108 H5 ID1H_RCLK
I/O0109 G5 ID1H_LOCK
I/O0110 D7 ID1H_PWRDN
I/O0111 C7 ID1H_REN

I/O-VREF-B0 B5
I/O-VREF-B1 W4
I/O-VREF-B2 B6
I/O-VREF-B3 A18
I/O-VREF-B4 B7
I/O-VREF-B5 Y19
I/O-VREF-B6 U13
I/O-VREF-B7 V15
I/O-VREF-E0 U15
I/O-VREF-E1 V18
I/O-VREF-E2 U20
I/O-VREF-E3 V21
I/O-VREF-E4 W11
I/O-VREF-E5 W17
I/O-VREF-E6 W19
I/O-VREF-E7 W21
I/O-VREF-E8 V12
I/O-VREF-E9 Y14
I/O-VREF-E10 Y15
I/O-VREF-E11 Y16
I/O-VREF-E12 A5
I/O-VREF-E13 E17

IC2.10 ID4E_PWRDN
IC2.10 ID4E_REN
IC2.10 ID3E_PWRDN
IC2.10 ID3E_REN
IC2.10 ID2E_PWRDN
IC2.10 ID2E_REN
IC2.10 ID1E_PWRDN
IC2.10 ID1E_REN

VCC_3V3

ID4E(0..9) ID4E_RCLK ID4E_LOCK ID4E_PWRDN ID4E_REN
ID3E(0..9) ID3E_RCLK ID3E_LOCK ID3E_PWRDN ID3E_REN
ID2E(0..9) ID2E_RCLK ID2E_LOCK ID2E_PWRDN ID2E_REN
ID1E(0..9) ID1E_RCLK ID1E_LOCK ID1E_PWRDN ID1E_REN

D592LV1210 DIN DIN* RCLK LOCK* PWRDN* REN REFCLK RCLK_R/F

R6.10 R7.10 R8.10 R9.10 JB3 100

IC3.10 IC4.10 IC5.10 IC6.10

IC12.10 ID4H_PWRDN ID4H_REN ID3H_PWRDN ID3H_REN ID2H_PWRDN ID2H_REN ID1H_PWRDN ID1H_REN

ID4H(0..9) ID4H_RCLK ID4H_LOCK
ID3H(0..9) ID3H_RCLK ID3H_LOCK
ID2H(0..9) ID2H_RCLK ID2H_LOCK
ID1H(0..9) ID1H_RCLK ID1H_LOCK

R10.10 R11.10 R12.10 R13.10

IC7.10 IC8.10 IC9.10 IC10.10

D-REFCLK D-REFCLK*

IC11.10 SN65LVDS9637A

R43.10 100

PLL-40-D PLL-40-D*

10UF 47UF 470UF

C46.10 C48.10 C34.10 C47.10 C35.10 C49.10 C42.10 C50.10 C53.10 C14.10 C61.10 C62.10 C65.10 C23.10 C22.10
C52.10 C45.10 C15.10 C58.10 C64.10 C16.10 C12.10 C51.10 C7.10 C59.10 C60.10 C63.10 C17.10 C70.10 C13.10
C39.10 C54.10 C38.10 C55.10 C18.10 C56.10 C11.10 C57.10 C10.10 C19.10 C66.10 C69.10 C66.10 C67.10 C20.10 C21.10
C26.10 C27.10 C28.10 C29.10 C30.10 C31.10 C44.10 C32.10 C43.10 C33.10 C35.10 C36.10 C37.10 C38.10 C45.10
C39.10 C40.10 C41.10 C34.10 C42.10 C25.10 C24.10 C11.10

VCC_2V5 VCC_ANA GND

RESISTORARRAY 100 VISHAY VSSR 1603
RESISTORARRAY 1K VISHAY VSSR 1603 FARNELL 309-9003

PINS U11 AND E11 FOR VIRTEX NOT USE !!!
PINS U11 AND E11 FOR VIRTEX-E NOT CONNECT
ALL CERAMID CAPACITORS AVX X7R C0403
TANTALUM CAPACITORS AVX TPS 3528
TANTALUM CAPACITORS AVX TPS 6032

UNIVERSITY OF MAINZ

DRAWING TITLE: LVDS1-8_INPUT

SIZE	REV.	DRAWING NO.
C		
SCALE	30.05.2000	SHEET 7 OF 13