Interposer Page 1

VCORE

C1	C2	C23	C21	C36	C22	C28	C35	C4	C13
4.7uF 10V	0.1uF	4.7uF 10V	0.1uF	4.7uF 10V	4.7uF 10V	0.1uF	0.1uF	0.1uF	4.7uF 10V

GND

VTT

C17	C19	C31	C33	C16	C20	C38	C18	C24	C27	C7
0.1uF	0.1uF	0.1uF	0.1uF	4.7uF 10V	0.1uF	0.1uF	0.1uF	0.1uF	0.1uF	0.1uF

GND

U$1G$1

XBOX_CPU

Address Lines

Pin	Signal
L3	A3#
K3	A4#
J2	A5#
L4	A6#
L1	A7#
K5	A8#
K1	A9#
J1	A10#
J3	A11#
K4	A12#
G1	A13#
H1	A14#
E4	A15#
F1	A16#
F4	A17#
F2	A18#
E1	A19#
C4	A20#
D3	A21#
D1	A22#
E2	A23#
D5	A24#
D4	A25#
C3	A26#
C1	A27#
B3	A28#
A3	A29#
B2	A30#
C2	A31#
A4	A32#
A5	A33#
B4	A34#
C5	A35#

Request Phase Signals

Pin	Signal
T2	REQ0#
V4	REQ1#
V2	REQ2#
W3	REQ3#
W5	REQ4#
W2	RP#
AB2	ADS#

Error Signals

Pin	Signal
AA1	AERR#
AB1	AP0#
Y2	AP1#
E6	BERR#
Y21	BINIT#
AD9	IERR#

Arbitration Phase Signals

Pin	Signal
C6	BREQ0#
U4	BPRI#
T4	BNR#
R1	LOCK#

Snoop Phase Signals

Pin	Signal
V1	HIT#
Y4	HITM#
U3	DEFER#

Response Phase Signals

Pin	Signal
U1	RS0#
AA2	RS1#
W1	RS2#
Y1	RSP#
U2	TRDY#

Compatibility

Pin	Signal
AD10	A20M#
AC12	FERR#
AC9	FLUSH#
AC13	IGNNE#
AB10	SMI#
V5	PWRGOOD#
AC11	STPCLK#
AB12	SLP#
AB18	INTR/LINT0
AC19	NMI/LINT1
AA10	INIT#
A6	RESET#
M3	BCLK

Pin	Signal
D10	D0#
D11	D1#
C7	D2#
C8	D3#
B9	D4#
A9	D5#
C10	D6#
B11	D7#
C12	D8#
B13	D9#
A14	D10#
B12	D11#
E12	D12#
B16	D13#
A13	D14#
D13	D15#
D15	D16#
B14	D17#
E14	D18#
C13	D19#
A19	D20#
B17	D21#
A18	D22#
C17	D23#
D17	D24#
C18	D25#
B19	D26#
D18	D27#
B20	D28#
A20	D29#
B21	D30#
D19	D31#
C21	D32#
E18	D33#
C20	D34#
F19	D35#
D21	D36#
H18	D37#
F18	D38#
J18	D39#
F21	D40#
E20	D41#
H19	D42#
E21	D43#
J20	D44#
H21	D45#
L18	D46#
G20	D47#
P18	D48#
G21	D49#
K18	D50#
T20	D51#
M18	D52#
L21	D53#
R19	D54#
K19	D55#
T20	D56#
J21	D57#
L20	D58#
M19	D59#
U18	D60#
R18	D61#
D62#	
D63#	

Pin	Signal
V20	DEP0#
T21	DEP1#
U21	DEP2#
R21	DEP3#
V18	DEP4#
P21	DEP5#
P20	DEP6#
U19	DEP7#

Pin	Signal
AA3	DBSY#
T1	DRDY#
AA15	TD_P
AB16	TD_N
AA12	BSEL0
AB15	BSEL1
AA16	EDGECTRLP

THERMDA / THERMDC

U$1G$2

XBOX_CPU

apc

Pin	Signal
AB21	PICD0
Y20	PICD1
AA18	PICCLK

Debug Breakpoint

Pin	Signal
AA21	BP2#
Y21	BP3#
W21	BPM0#
W19	BPM1#

Test Access Port/ITP

Pin	Signal
AA11	TCK
AQ13	TDI
AC15	TDO
AD14	TMS
AA14	TRST#
AB20	PREQ#
W20	PRDY#

Pin	Signal
P2	CLKREF
AA9	CMOSREF_1
AQ18	CMOSREF_2
AD19	RTTIMPEDP

GEYSERVILLE

Pin	Signal
R2	GHI#

VTT REF

Pin	Signal
E5*8	VREF

Pin	Signal
AD17	TESTHI
Y5	TESTLO1
N5	TESTLO2
AD20	TESTP_1
H4	TESTP_2
AA17	TESTP_3
G4	TESTP_4

Analog

Pin	Signal
L2	PLL1
M2	PLL2

Signal	Pin
VCC	H8*50 VCORE
VSS	A2*157 GND
VCCT	AA6*71 VTT
NC	A15*24
RSVD	AB19

Interposer Page 2

Left connector (pin-net list)

Pin	Net		Pin	Net
W1	D0#		AK8	A3# (A3)
T4	D1#		AH12	A4# (A4)
N1	D2#		AH8	A5# (A5)
M6	D3#		AN9	A6# (A6)
U1	D4#		AL15	A7# (A7)
S3	D5#		AH10	A8# (A8)
T6	D6#		AL9	A9# (A9)
J1	D7#		AH6	A10# (A10)
S1	D8#		AK10	A11# (A11)
P6	D9#		AN5	A12# (A12)
Q3	D10#		AL7	A13# (A13)
M4	D11#		AK14	A14# (A14)
Q1	D12#		AL5	A15# (A15)
L1	D13#		AN7	A16# (A16)
N3	D14#		AE1	A17# (A17)
H4	D15#		Z6	A18# (A18)
R4	D16#		AG3	A19# (A19)
P4	D17#		AC3	A20# (A20)
H6	D18#		AJ1	A21# (A21)
L3	D19#		AE3	A22# (A22)
G1	D20#		AB6	A23# (A23)
F8	D21#		AB4	A24# (A24)
G3	D22#		AF6	A25# (A25)
K6	D23#		Y3	A26# (A26)
E3	D24#		AA1	A27# (A27)
E1	D25#		AK6	A28# (A28)
F12	D26#		Z4	A29# (A29)
A5	D27#		AA3	A30# (A30)
A3	D28#		AD4	A31# (A31)
J3	D29#		W33	PLL1
C5	D30#		U33	PLL2
F6	D31#			
C1	D32#		AN17	BPRI#
C7	D33#		AH14	BNR#
B2	D34#		AK20	LOCK#
C9	D35#		AN31	ADS#
A9	D36#		AK18	REQ0#
D8	D37#		AH16	REQ1#
D10	D38#		AH18	REQ2#
C15	D39#		AL19	REQ3#
D14	D40#		AL17	REQ4#
D12	D41#		AN27	DRDY#
A7	D42#		AL27	DBSY#
A11	D43#		AN25	TRDY#
C11	D44#		AL25	HIT#
A21	D45#		AL23	HITM#
A15	D46#		AN19	DEFER#
A17	D47#		AH26	RS0#
C13	D48#		AH22	RS1#
C25	D49#		AK28	RS2#
A13	D50#		C35	BPM0#
D16	D51#		E35	BPM1#
A23	D52#		G33	BP2#
C21	D53#		E37	BP3#
C19	D54#		J37	PREQ#
C27	D55#		A35	PRDY#
A19	D56#		AE35	IERR#
C23	D57#		AL33	TCK
C17	D58#		AN35	TDI
A25	D59#		AN37	TDO
A27	D60#		AK32	TMS
E25	D61#		AN33	TESTLO1
F16	D62#		AH28	THERMTRIP#
	D63#		AL35	VID0
AJ33	BSEL0		AN36	VID1
AL29	TD_N (THERMDN)		AL37	VID2
AL31	TD_P (THERMDP)		AJ37	VID3
AN29	BR0#		W37	BCLK
AG1	EDGECTRL		AK26	POWERGOOD
	VTT		X4	RESET#
C37	CPUPRES#/CPUMISS			
AC35	FERR#			
AE33	A20M#			
AG37	IGNNE#			
J35	PICD0#			
L35	PICD1#			
J33	PICCLK			
M36	INTR/LINT0			
L37	NMI/LINT1			
AJ35	SMI#			
AG35	STPCLK#			
AH30	SLP#			
AE37	FLUSH#			
AG33	INIT#			

Decoupling capacitors

VCORE:
- C29 0.1uF
- C34 4.7uF 10V
- C11 0.1uF
- C8 4.7uF 10V

VCORE:
- C30 0.1uF
- C12 0.1uF
- C15 4.7uF 10V

VCORE:
- C9 0.1uF
- C6 4.7uF 10V
- C26 4.7uF 10V
- C25 4.7uF 10V

1V / VREF:
- C32 0.1uF
- C3 0.1uF
- C10 0.1uF
- C5 0.1uF

GND

Resistor network (VTT)

Pin	Net		
TMS	RN1A 1k/8P4R	1	8
TCK	RN1B 1k/8P4R	2	7
TDI	RN1C 1k/8P4R	3	6
PREQ#	RN1D 1k/8P4R	4	5

CPU (center)

Left side:
- AA5*74 VCC_CORE — VCORE
- X34 VTT/VCC_CORE — VTT

Top pins:
- AH4 RSVD/RESET — RESET#
- A20*30 RSVD/NC
- AA33*15 RSVD/VTT — VTT
- N37 RSVD/VTT_N37 (R1_15)
- E27 RSVD/SLEWCTRL — EDGECTRLP
- S35 RSVD/RTCTRL — RTTIMPEDP
- N33 TU/CU_BR#1
- X34 (X2) TU/CU_ORO_BR#1

Right side:
- AB36 VCC_CMOS — VTT
- AD36 VCC_1.5V
- Z36 VCC_2.5V
- E33 VREF0
- F18 VREF1
- K4 VREF2
- R6 VREF3
- V6 VREF4
- AD6 VREF5
- AK12 VREF6
- AK22 VREF7/CMOSREF — VREF
- AN15 BR#1
- Y33 GND/CLKRES — CLKREF (1.25V)
- C14 0.1uF — GND

Bottom:
- A37*71 GND — GND
- AK36 GND/VID4
- A31 GND/BSEL1 — BSEL1
- AK4 VTT/PWRGOOD
- AM2 NC
- AN3 DYN_OE — TESTHI
- R4 1k — VTT
- C37 1uF — GND

Other components

- R3 10 (TD_P / GND)
- R2 0 (POWERGOOD / RESET#)

Speed Step Circuit

S2B-ZR-SM4A-TF(LF)(SN)

J2
SHIELD
S1*2

+3.3V

C42
1000pF
GND

VIO
GND
VCC
OUT
GND

+3.3V
C41
0.1uF
GND

R6
33

C43
10pF
GND

U3 — NC7SZ32P5X

A 1
B 2
GND 3
VCC 5
Y 4

+3.3V

GND

C44
0.1uF
GND

R8 470
LED1
GND

U4 — NC7WZ07P6X

A1 1
A2 3
GND 2
Y1 6
VCC 5
Y2 4

+3.3V

GND

+3.3V   VTT
R7 330

STPCLK#

C45
0.1uF
GND

C46
10pF
GND

Speed Step Circuit

	1	2	3	4	5	6	7	8	9

A

B

C

S2B-ZR-SM4A-TF(LF)(SN)

SHIELD

S1*2

+3.3V

2
1 J1

2
1

C39
4.7uF 10V

C40
10uF

GND

D

+3.3V

GND

R5 1k