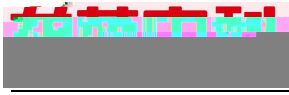


LOONGSON

' 5) \$\$\$#' 6) \$\$\$

J% +

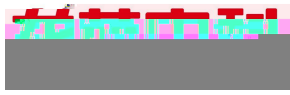
2025 06



3A5000/3B5000

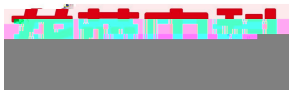
3A5000/3B5000

1.	III	
1.1.	èV.	n M n
1.1.1.	1	
2.	3	
2.1.	3	
2.2. HYPERTRANSPORT m	1... 4	
2.3. DDR4 SDRAM	8	
2.4.	9	
2.5. SPD .I./O.	1...10... 1	n
2.6.	11	
2.7. JTAG ... è	12	
2.8. #	12	

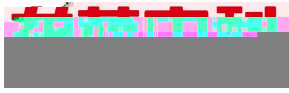


8.1. 28

8.2. / . 2 m n n



2.1	3A5000/3B5000			4
3.1	3A5000	HT		17
3.2	3B5000	HT	1	17
3.3	3B5000	HT	2	17
3.4	3B5000	HT		18
3.5	3B5000	HT		18
3.6	3B5000	HT		19
8.1				29
12.1	3A5000/3B5000			72
12.2	3A5000/3B5000			72
12.3	3A5000/3B5000			73
12.4	3A5000M			74
12.5	3A5000M			74
12.6	3A5000M			75



1.

3A5000/3B5000

3A4000/3B4000

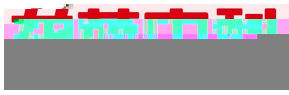
3A4000

IO

”

”

’\$



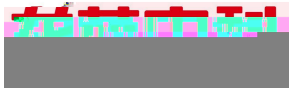
3A5000/3B5000

LS3A5000-i	0.90V/0.95V	$\pm 25\text{mV}$	<12W	-40 - 85	1.5GHz
------------	-------------	-------------------	------	----------	--------

* VDDN

* VDDN SPEC CPU 2006 RATE

3A5000



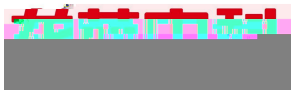
2.

21

3A500/B500

121

- HypeTraspot
- DDR4 SDRAM
- o
- o I/O o
- @ p



HTx_Lo HTx_Hi

HyperTransport

- 16
- 16
- 2
- 2
- 2
- 2
- 4 16 / 8
- 4 8

3A5000/3B5000

HyperTransport

50KOhm

16

HTx_Hi_Hostmode

HTx_Hi_PowerOK

HTx_Hi_Resetn

HTx_Hi_Ldt_Stopn HTx_Hi_Ldt_reqn

2 1 HT

HTO

/

HTO_8x2	I	1 0		HTO HTO	HTO_Lo 16	HTO_Hi	VDDE_1V8
HTO_Lo_Hostmode	I	1	n				



HTO_HI_Resetn	I/O	HTO_8x2 HTO_8x2 HTO_HI_Hbstmode HTO_HI_Hbstmode	HTO_HI	Resetn	VDDE_1V8	
HTO_HI_LDT_Stopn	I/O	HTO_8x2 HTO_8x2 HTO_HI_Hbstmode HTO_HI_Hbstmode	HTO_HI	Ldt_Stopn	VDDE_1V8	
HTO_HI_LDT_reqn	I/O	HTO_8x2 HTO_8x2	HTO_HI	Ldt_Reqn	VDDE_1V8	
HTO_Tx_CADp[15:0]	0	HTO_8x2 HTO_8x2 [7:0] [15:8]	HTO_Lo HTO_HI	HTO	HT_VDDE	
HTO_Tx_CADn[15:0]	0	HTO_8x2 HTO_8x2 [7:0] [15:8]	HTO_Lo HTO_HI	HTO	HT_VDDE	xCADn

■ 1

2.2 3A5000/3B5000

2.2 DDR4

		/			
M00/1_DQ[63: 0]	I/O				MEM_VDDE
M00/1_CB[7: 0]	I/O	ECC			MEM_VDDE
M00/1_DCSp[8: 0]	I/O	ECC			MEM_VDDE
M00/1_DCSn[17: 0]	I/O	ECC			MEM_VDDE
M00/1_DMn_DCSp*[17: 9]	0	DMB-0	ECC	DCSp17-9	MEM_VDDE
M00/1_A[13: 0]	0				MEM_VDDE
M00/1_A17	0				MEM_VDDE
M00/1_BA[1: 0]	0	Bank			MEM_VDDE
M00/1_BG[1: 0]		Bank			MEM_VDDE
M00/1_VEn	0		A14		MEM_VDDE
M00/1_CASn	0		A15		MEM_VDDE
M00/1_RASn	0		A16		MEM_VDDE
M00/1_CS[7: 0]	0				MEM_VDDE
M00/1_CKE[3: 0]					

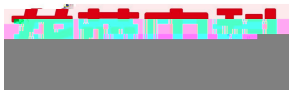
MEMB

MEMAD

EK

17

C



CHIP_CONFIG[5:0]	I	[5] DCDL [4] HT1-Io 8/16 [3] HT1-hi [2] NODE_ID[3] [1] HT Gen1 [0] SE	VDDE_1V8	6' b000010
NODE_ID[2:0]	I	0 3.3	VDDE_1V8	
LOCC_EN	I	1' b1 1' b0	VDDE_1V8	

- SYSRESETn 3A5000/3B5000
- SYSCLK SYSRESETn SYSRESETn
- SYSRESETn
- 64K SYSCLK

- CHIP_CONFIG[5:0] 3A5000/3B5000

2.5. =#C

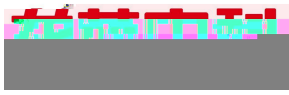
3A5000/3B5000 I/O SPI UART I2C
 SPI SPI flash UART GPIO

SPI

-
- 4
-
-
-
- SPI
- SPI

UART

- /
-
- 16
-
-



■ FI FO

■ NS16550A

I 2C

SDA

SCL

400kbps

3A5000

I 2C

I / O

Fl ash

17mA

35mA

2 4 SPI

/

@

2.6.

3A5000/3B5000

1

NMI_n

32

GPI O

NMI

HT

GPI O

INTO-7

NMI_n

2.7

50KOhm

2.7

	/			
NMI _n	I	1	VDDE_1V8	

2.7. >H5;

3A5000/3B5000

JTAG

JTAG

50KOhm

2.8 JTAG

	/			
TDI	I	JTAG	VDDE_1V8	
TDO	O	JTAG	VDDE_1V8	
TMS	I	JTAG	VDDE_1V8	
TRST _n	I	JTAG	VDDE_1V8	
TCK	I	JTAG	VDDE_1V8	
TSEL[1:0]	I	JTAG 2 b00: LA464 JTAG 2 b01: JTAG	VDDE_1V8	2 b00

2.8.

3A5000/3B5000

DOTEST

2.9

	/			
DOTEST _n	I	DOTEST _n =0 DOTEST _n =1	VDDE_1V8	

2. 9.

3A5000/3B5000 2. 10 SYSCLK
 HTO_CLKp/HTO_CLKn HT1_CLKp/HT1_CLKn
 CLKSEL[9: 0] 3A5000/3B5000 Core DDR SYSCLK
 CLKSEL[4] HT
 HTO_CLKp/HTO_CLKn HT1_CLKp/HT1_CLKn HTO HT1
 SYSCLK CLKSEL[9: 4] CLKSEL
 2. 11 2. 12 2. 13

2. 10

	/	(MHz)		
SYSCLK	I	25/100	PLL	VDDE_1V8
HTO_CLKp/ HTO_CLKn	I	200	HTO	HT_VDDE
HT1_CLKp/ HT1_CLKn	I	200	HT1	HT_VDDE
CLKSEL[9: 0]	I	-	Core DDR HT	VDDE_1V8

2. 11 CORE

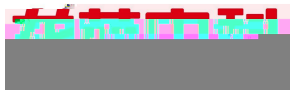
CLKSEL[1: 0]	2' b00: 1GHz 2' b01: 2GHz 2' b10: PLL 2' b11: SYSCLK 100MHz/25MHz	4. 8 - 6. 4GHz	2' b10
---------------	--	----------------	--------

2. 12 MEM

CLKSEL[3: 2]	2' b00: 466MHz 2' b01: 600MHz 2' b10: PLL 2' b11: SYSCLK 100MHz/25MHz	4. 8 - 6. 4GHz	2' b10
---------------	--	----------------	--------

2. 13 HT

CLKSEL[9]	1' b1 HT 1' b0 HT		1' b0
CLKSEL[8]	1' b1 HT PLL 1' b0 HT PLL	SYSCLK	1' b1
CLKSEL[7: 6]	2' b00 PHY 2' b01 PHY 2' b10 2' b11 PHY	1. 6GHz 6. 4GHz 4. 8GHz	2' b01
CLKSEL[5]			1' b0
CLKSEL[4]	1- 25MHz 0-	100MHz	1' b0



3A5000/3B5000 AA AB CLKSEL[9: 4] 6' b110001
 BI OS HT
 6' b010100 CLKSEL[3: 2] 5' b10
 BI OS MEM CLKSEL[1: 0] 5' b10 BI OS NODE
 CLKSEL[4]

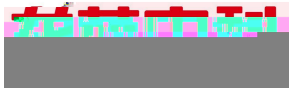
2. 10.

2. 14

VDDN		VDDN
VDDP		VDDP
		VDDMC
		VDDMPHY
VDDE_1V8	I O	VDDE_1V8
	SE I O	
	VTSENSOR OTP	
MEM_VDDE	DDR I O	VDDE_DDR
MEM_VREF	DDR	VDDE_VREF
HT_VDDE	HT I O	VDDE_1V2T VDDE_1V2R
PLL_SYS_AVDD	SYS PLL	PLL_SYS_AVDD
PLL_SYS_DVDD	SYS PLL	PLL_SYS_DVDD
PLL_DDR_AVDD	DDR PLL	PLL_DDR_AVDD
PLL_DDR_DVDD	DDR PLL	PLL_DDR_DVDD
PLL_DDRPHY_VDD	DDRPHY PLL	PLL_DDRPHY_VDD
PLL_SE_VDD	SE PLL	PLL_SE_VDD
PLL_HTO/1_AVDD	HTO/1 PLL	PLL_HTO/1_AVDD
PLL_HTO/1_DVDD	HTO/1 PLL	PLL_HTO/1_DVDD

2. 11. ; D=C

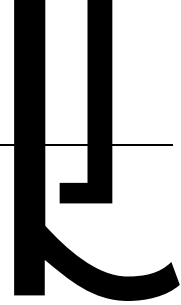
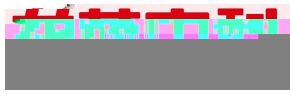
3A5000/3B5000 32 GPI O
 GPI 000 - GPI 015 GPI O
 I O GPI 016 - GPI 031 HT HT
 I O HTO/1_HI /Lo_Hostmode
 HT I O
 GPI O GPI O



GPI O
GPI O 17mA 35mA

2.15 GPI O

GPI O	7	1
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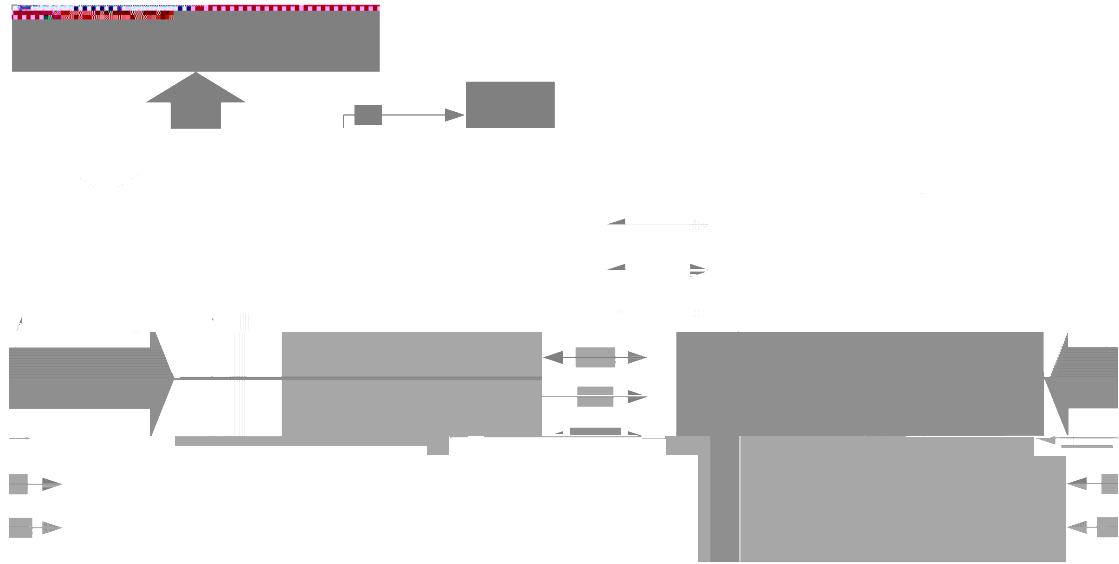
3. <mdYf Hf Ubgdcf h

3A5000/3B5000	16	HyperTransport	16
	8	HyperTransport	
3A5000/3B5000	HyperTransport	I/O Cache	
3B5000	HTO	Cache	

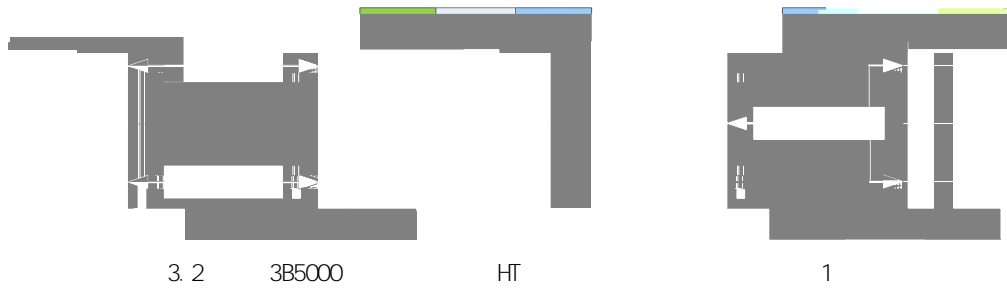
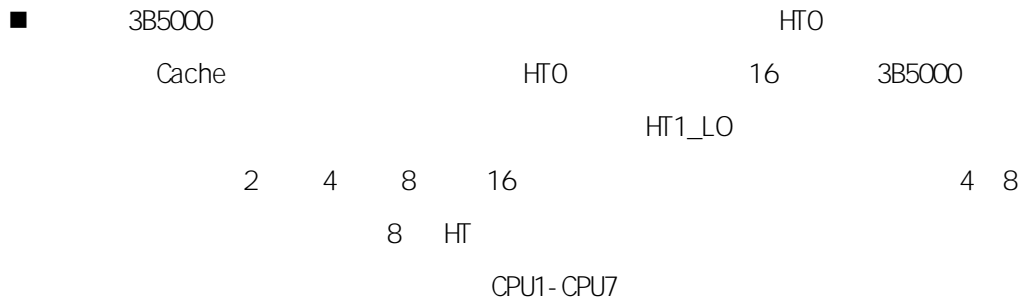
3. 1. <mdYf Hf Ubgdcf h

HyperTransport

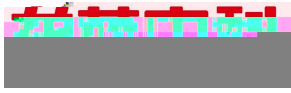
- HyperTransport 1.03/HyperTransport 3.0
- 200 - 3200MHz
- HT1.0 8
- HT3.0 8/16
- 16 8
- I/O Cache
- HT21 T
-
-



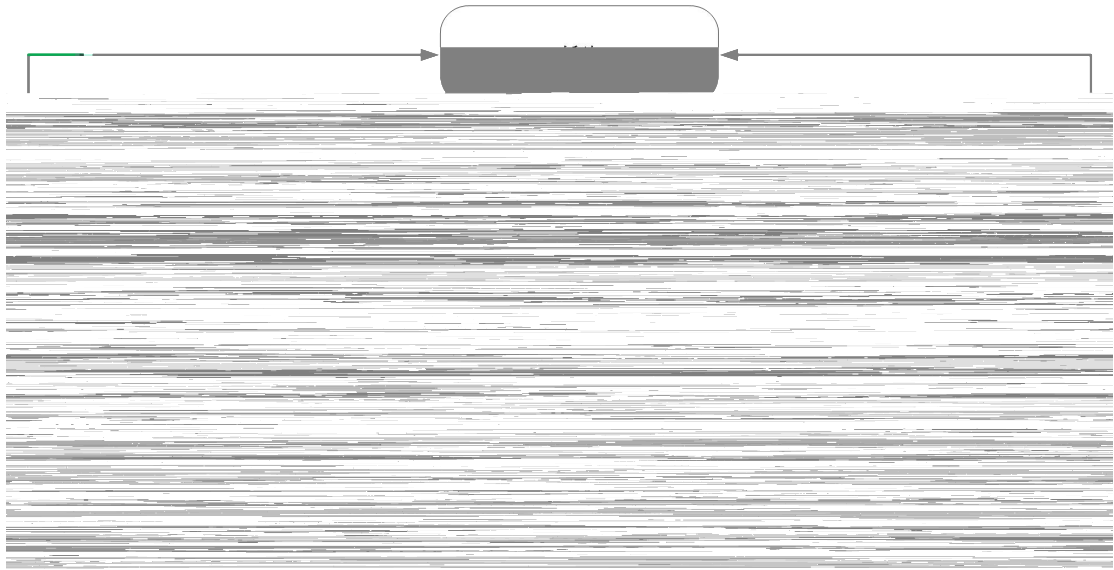
3.1 3A5000 HT



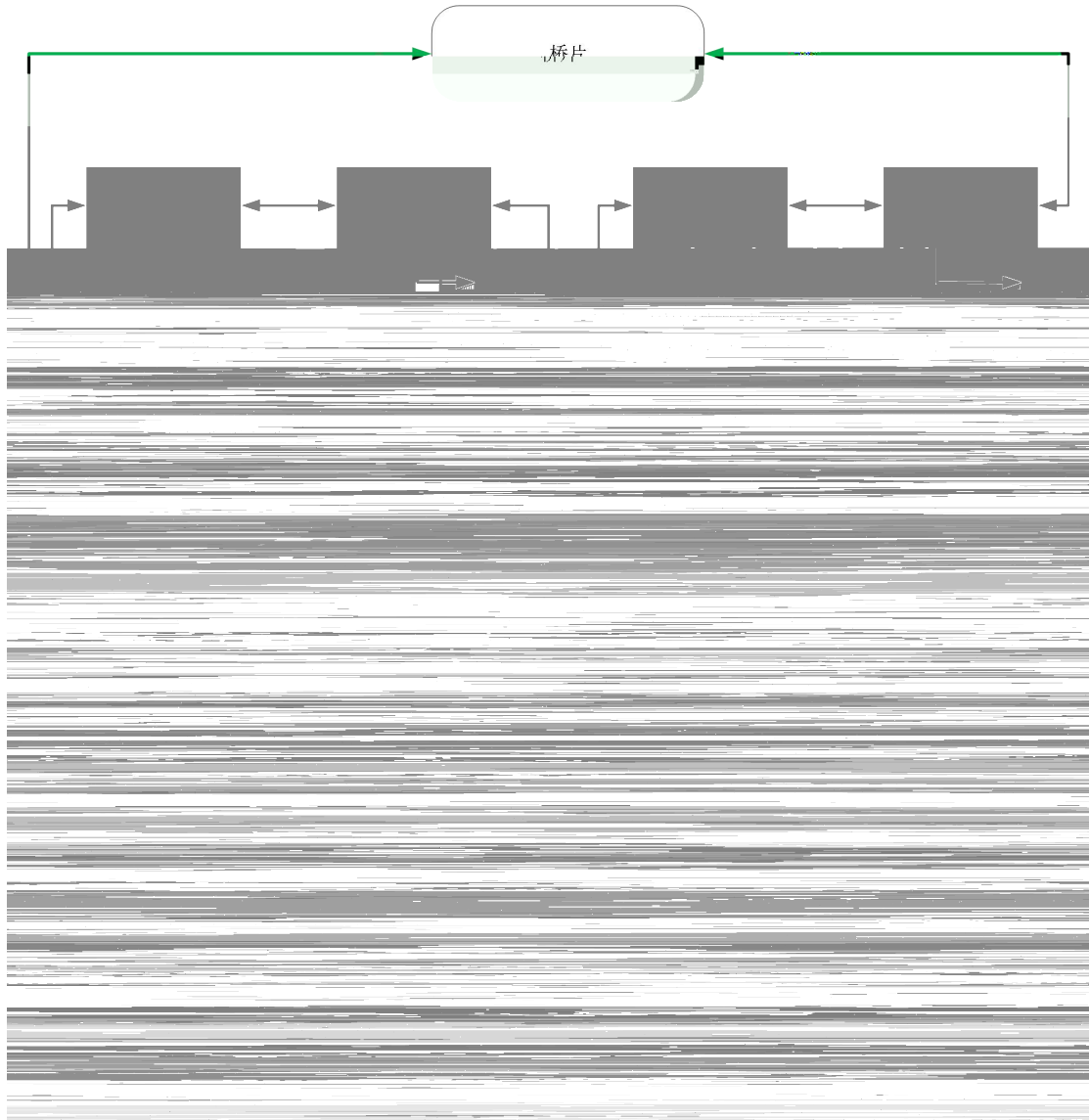
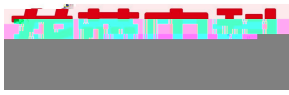
3.3 3B5000 HT 2



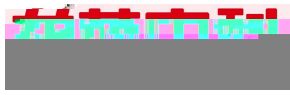
3.4 3B5000 HT



3.5 3B5000 HT



3.6 3B/-



4.

3A5000/3B5000 DDR4 SDRAM
JESD79-4B / JESD79-4B

4.1.

3A5000/3B5000 8 CS 4 CS

3A5000/3B5000
DDR4

CPU

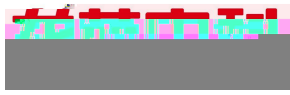
3A5000/3B5000 /
3A5000/3B5000

-
-
-
-
- DCC
- ECC 1
-
- RDI MM UDI MM So-DI MM
- x4 x8 x16
- 133-800MHz
- DDR4-3200

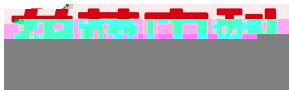
4.2.

Ini t_start

Ini t

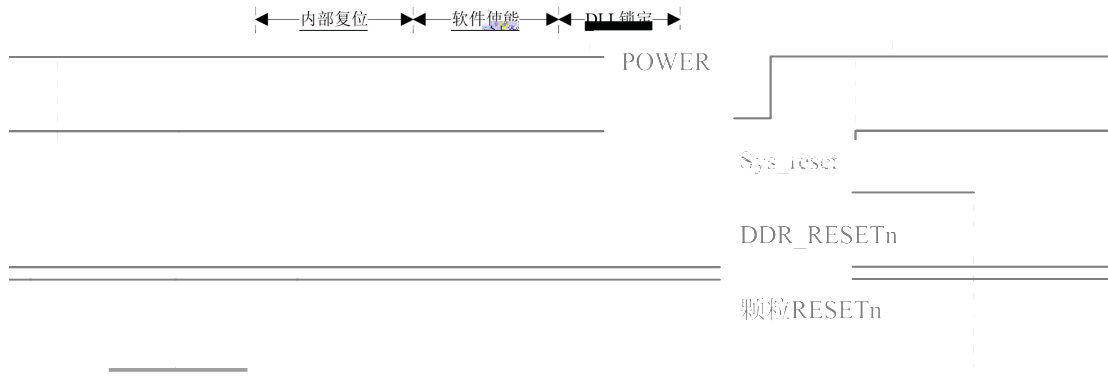


- (2) pm_phy_i ni t_start 1 PHY
- (3) DLL pm_dll_i ni t_done 1
- (4) pm_dll_lock_* pm_pll_lock_* 1
- (5) pm_clken_*
- (6) pm_i ni t_start 1
- (7) pm_dram_i ni t pm_cs_enabl e



(3) pad_reset_po[1:0] = 2' b01

DDR_RESETh

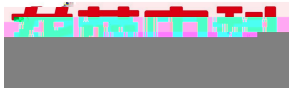


STR

2

STR

3



6.

6.1.

6.1

		Mn.	Max.	Unit
VDDN		-0.3	1.35	V
VDDP		-0.3	1.35	V
VDDE_1V8	1.8V I/O	-0.3	1.9	V
MEM_VDDE	DDR I/O	-0.3	1.6	V
MEM_VREF	DDR	-0.3	0.8	V
HT_VDDE	HT I/O	-0.3	1.3	V
PLL_SYS_AVDD	SYS PLL	-0.3	1.4	V
PLL_SYS_DVDD	SYS PLL	-0.3	1.4	V
PLL_DDR_AVDD	DDR PLL	-0.3	1.4	V
PLL_DDR_DVDD	DDR PLL	-0.3	1.4	V
PLL_DDRPHY_VDD	DDRPHY PLL	-0.3	1.4	V
PLL_SE_VDD	SE PLL	-0.3	1.4	V
PLL_HTO/1_AVDD	HTO/1 PLL	-0.3	1.4	V
PLL_HTO/1_DVDD	HTO/1 PLL	-0.3	1.4	V
Tstg	Storage Temperature	-55	100	

ESD HBM1000V

6.2. f_{HT} (MHz)

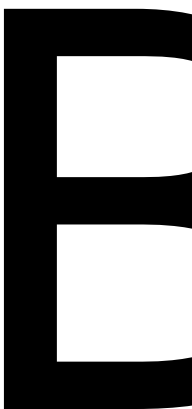
HT HT1.0 HT3.0 200MHz - 3200MHz DC AC

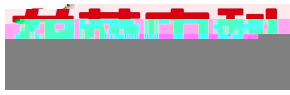
HT1.0 200 - 800MHz HT1.03a

HT3.0 1000 - 3200MHz HT3.0

6.3. 88F(

DDR4 JESD79 9 T





100MHz 25MHz

CLKSEL[4]

6.2

	/	(MHz)		
SYSCLK	I	25/100	Core	PLL VDDE_1V8
HT0_CLKp/ HT0_CLKn	I	200	HT0	HT_VDDE
HT1_CLKp/ HT1_CLKn	I	200	HT1	HT_VDDE

6.4.1.

SYSCLK LVCOM Φ 1.8v

VDDE_1V8 1.8V					
V					
V _{ih}		1.25			V
V _{il}				0.4	V
C _n			2		pf
Tr		1	2.2	3.6	V/ns
Tf					
Duty Cycle			45%	55%	
Cycle-Cycle Clock jitter		multiple output frequencies switching	74		ps
RMS Phase jitter		RMS jitter	0.5		ps

6.4.2.

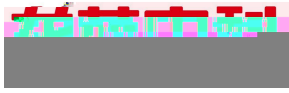
HTx_CLKp/HTx_CLKn CLKSEL HT PHY
LVDS 3A5000 SYSCLK HT PHY

V					
V _{ih}		454		247	mV
V _{il}		-247		-454	mV
C _n					
Tr			300		ps
Tf			300		ps
Duty Cycle			45%	55%	
Cycle-Cycle Clock jitter		multiple output frequencies switching	46		ps
RMS Phase jitter		RMS jitter	1.5	0.75	ps



3A5000/ 3B5000

PLL_SE_VDD	SE PLL	PLL_SE_VDD
PLL_HTO/1_AVDD	HTO/1 PLL	PLL_HTO/1_AVDD
PLL_HTO/1_DVDD	HTO/1 PLL	PLL_HTO/1_DVDD

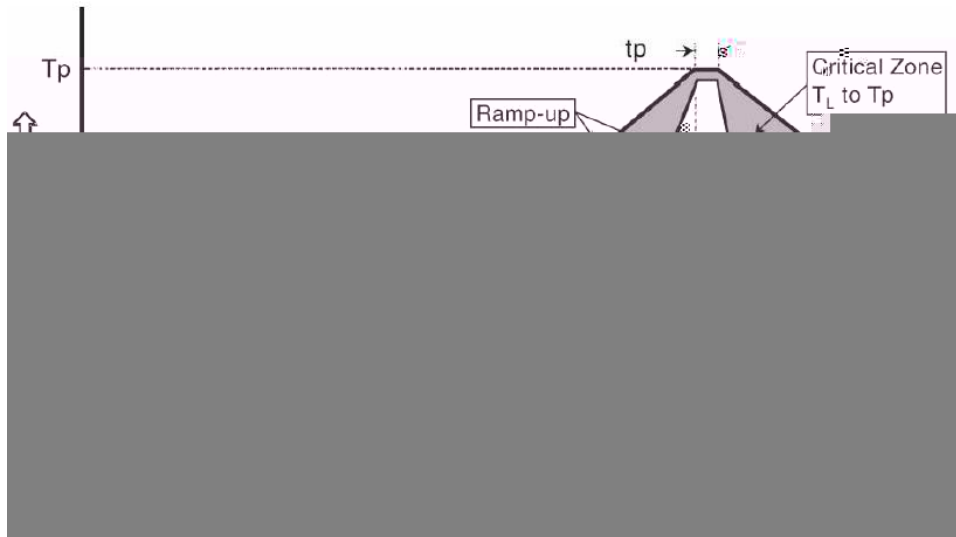


7.

TDP “

8.3

Profile Feature		Pb-Free Assembly
Average ramp-up rate (T _{max} to T _p)		3° C/second max.
Preheat	Temperature Min (T _{min})	150 ° C
	Temperature Max (T _{max})	200 ° C
	Time (T _{min} to T _{max}) (t _s)	60-180 seconds
Time maintained above	Temperature (T _L)	217 ° C
	Time (t _L)	60-150 seconds
Peak Temperature (T _p)		245° C
Time within 5° C of actual Peak Temperature (t _p) ²		20-40 seconds
Ramp-down Rate		6 ° C/second max.
Time 25° C to Peak Temperature		8 minutes max.



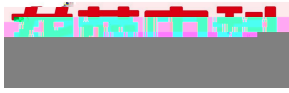
8.1

9.

9.1.

9.1

Net/Pwr	Pin Number	Net Name	X Coord	Y Coord
n	V27	NC	8000.00	1000.00
n	U27	NC	8000.00	2000.00
n	V26	NC	7000.00	1000.00
n	U26	NC	7000.00	2000.00
n	V11	NC	-8000.00	1000.00
n	U11	NC	-8000.00	2000.00
n	V12	NC	-7000.00	1000.00
n	U12	NC	-7000.00	2000.00
n	Y27	NC	8000.00	-1000.00
n	AA27	NC	8000.00	-2000.00
n	Y26	NC	7000.00	-1000.00
n	AA26	NC	7000.00	-2000.00
n	Y11	NC	-8000.00	-1000.00
n	AA11	NC	-8000.00	-2000.00
n	Y12	NC	-7000.00	-1000.00
n	AA12	NC	-7000.00	-2000.00
n	N06	CHI_P_CONFI G0	-13000.00	6000.00
n	N03	CHI_P_CONFI G1	-16000.00	6000.00
n	N01	CHI_P_CONFI G2	-18000.00	6000.00
n	N02	CHI_P_CONFI G3	-17000.00	6000.00
n	P07	CHI_P_CONFI G4	-12000.00	5000.00
n	P05	CHI_P_CONFI G5	-14000.00	5000.00
n	P06	CLKSELO0	-13000.00	5000.00
n	P03	CLKSELO1	-16000.00	5000.00
n	P01	CLKSELO2	-18000.00	5000.00
n	P02	CLKSELO3	-17000.00	5000.00
n	R06	CLKSELO4	-13000.00	4000.00
n	R04	CLKSELO5	-15000.00	4000.00
n	R05	CLKSELO6	-14000.00	4000.00
n	R03	CLKSELO7	-16000.00	4000.00
n	R01	CLKSELO8	-18000.00	4000.00
n	R02	CLKSELO9	-17000.00	4000.00
n	V05	DOTESTN	-14000.00	0.00
n	T04	GPI 000	-15000.00	3000.00
n	T02	GPI 001	-17000.00	3000.00
n	T03	GPI 002	-16000.00	3000.00
n	T01	GPI 003	-18000.00	3000.00
n	U06	GPI 004	-13000.00	2000.00
n	U07	GPI 005	-12000.00	2000.00



Net/Pwr	Pl n Number	Net Name	X Coord	Y Coord
n	U05	GPI 006	-14000.00	2000.00
n	U02	GPI 007	-17000.00	2000.00
n	U03	GPI 008		



Net/Pwr	Pl n Number	Net Name	X Coord	Y Coord
n	A27	HTO_RX_CADP09	8000.00	18000.00
n	D22	HTO_RX_CADP10	3000.00	15000.00
n	D25	HTO_RX_CADP11	6000.00	15000.00
n	G24	HTO_RX_CADP12	5000.00	12000.00
n	G23	HTO_RX_CADP13	4000.00	12000.00
n	F26	HTO_RX_CADP14	7000.00	13000.00
n	F27	HTO_RX_CADP15	8000.00	13000.00
n	E21	HTO_RX_CLKN0	2000.00	14000.00
n	D26	HTO_RX_CLKN1	7000.00	15000.00
n	D21	HTO_RX_CLKP0	2000.00	15000.00
n	D27	HTO_RX_CLKP1	8000.00	15000.00
n	B26	HTO_RX_CTLN0	7000.00	17000.00
n	B28	HTO_RX_CTLN1	9000.00	17000.00
n	A26	HTO_RX_CTLP0	7000.00	18000.00
n	C28	HTO_RX_CTLP1	9000.00	16000.00
n	G37	HTO_TX_CADN00	18000.00	12000.00
n	F36	HTO_TX_CADN01	17000.00	13000.00
n	E36	HTO_TX_CADN02	17000.00	14000.00
n	C36	HTO_TX_CADN03	17000.00	16000.00
n	F34	HTO_TX_CADN04	15000.00	13000.00
n	D34	HTO_TX_CADN05	15000.00	15000.00
n	A35	HTO_TX_CADN06	16000.00	18000.00
n	F32	HTO_TX_CADN07	13000.00	13000.00
n	D33	HTO_TX_CADN08	14000.00	15000.00
n	B32	HTO_TX_CADN09	13000.00	17000.00
n	E31	HTO_TX_CADN10	12000.00	14000.00
n	A32	HTO_TX_CADN11	13000.00	18000.00
n	D31	HTO_TX_CADN12	12000.00	15000.00
n	E29	HTO_TX_CADN13	10000.00	14000.00
n	B31	HTO_TX_CADN14	12000.00	17000.00
n	F28	HTO_TX_CADN15	9000.00	13000.00
n	G36	HTO_TX_CADP00	17000.00	12000.00
n	F37	HTO_TX_CADP01	18000.00	13000.00
n	E37	HTO_TX_CADP02	18000.00	14000.00
n	C37	HTO_TX_CADP03	18000.00	16000.00
n	G34	HTO_TX_CADP04	15000.00	12000.00
n	D35	HTO_TX_CADP05	16000.00	15000.00
n	B35	HTO_TX_CADP06	16000.00	17000.00
n	G32	HTO_TX_CADP07	13000.00	12000.00
n	E33	HTO_TX_CADP08	14000.00	14000.00
n	C32	HTO_TX_CADP09	13000.00	16000.00
n	F31	HTO_TX_CADP10	12000.00	13000.00
n	A33	HTO_TX_CADP11	14000.00	18000.00
n	D30	HTO_TX_CADP12	11000.00	15000.00
n	D29	HTO_TX_CADP13	10000.00	15000.00
n	A31	HTO_TX_CADP14	12000.00	18000.00

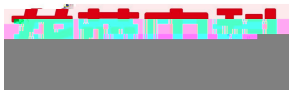


Net/Pwr	Pin Number	Net Name	X Coord	Y Coord
n	G28	HTO_TX_CADP15	9000.00	12000.00
n	D36	HTO_TX_CLKN0	17000.00	15000.00
n	G30	HTO_TX_CLKN1	11000.00	12000.00
n	D37	HTO_TX_CLKP0	18000.00	15000.00
n	F30	HTO_TX_CLKP1	11000.00	13000.00
n	A34	HTO_TX_CTLN0	15000.00	18000.00
n	A30	HTO_TX_CTLN1	11000.00	18000.00
n	B34	HTO_TX_CTLP0	15000.00	17000.00
n	B30	HTO_TX_CTLP1	11000.00	17000.00
n	A29	HTOCLKN	10000.00	18000.00
n	A28	HTOCLKP	9000.00	18000.00
n	H37	HT1_8X2	18000.00	11000.00
n	K35	HT1_HI_HOSTMODE	16000.00	9000.00
n	K33	HT1_HI_LDT_RECN	14000.00	9000.00
n	K34	HT1_HI_LDT_STOPN	15000.00	9000.00
n	K36	HT1_HI_POWEROK	17000.00	9000.00
n	K32	HT1_HI_RSTN	13000.00	9000.00
n	H35	HT1_LO_HOSTMODE	16000.00	11000.00
n	H33	HT1_LO_LDT_RECN	14000.00	11000.00
n	H34	HT1_LO_LDT_STOPN	15000.00	11000.00
n	H36	HT1_LO_POWEROK	17000.00	11000.00
n	H32	HT1_LO_RSTN	13000.00	11000.00
n	A19	HT1_RX_CADN00	0.00	18000.00
n	B18	HT1_RX_CADN01	-1000.00	17000.00
n	G18	HT1_RX_CADN02	-1000.00	12000.00
n	A17	HT1_RX_CADN03	-2000.00	18000.00
n	B16	HT1_RX_CADN04	-3000.00	17000.00
n	B15	HT1_RX_CADN05	-4000.00	17000.00
n	A14	HT1_RX_CADN06	-5000.00	18000.00
n	G16	HT1_RX_CADN07	-3000.00	12000.00
n	B14	HT1_RX_CADN08	-5000.00	17000.00
n	B11	HT1_RX_CADN09	-8000.00	17000.00
n	D15	HT1_RX_CADN10	-4000.00	15000.00
n	E13	HT1_RX_CADN11	-6000.00	14000.00
n	F14	HT1_RX_CADN12	-5000.00	13000.00
n	H15	HT1_RX_CADN13	-4000.00	11000.00
n	G12	HT1_RX_CADN14	-7000.00	12000.00
n	G11	HT1_RX_CADN15	-8000.00	12000.00
n	B19	HT1_RX_CADP00	0.00	17000.00
n	C18	HT1_RX_CADP01	-1000.00	16000.00
n	F18	HT1_RX_CADP02	-1000.00	13000.00
n	A18	HT1_RX_CADP03	-1000.00	18000.00
n	A16	HT1_RX_CADP04	-3000.00	18000.00
n	A15	HT1_RX_CADP05	-4000.00	18000.00
n	A13	HT1_RX_CADP06	-6000.00	18000.00
n	F16	HT1_RX_CADP07	-3000.00	13000.00



Net/Pwr	Pin Number	Net Name	X Coord	Y Coord
n	C14	HT1_RX_CADP08	-5000.00	16000.00
n	A11	HT1_RX_CADP09	-8000.00	18000.00
n	D16	HT1_RX_CADP10	-3000.00	15000.00
n	D13	HT1_RX_CADP11	-6000.00	15000.00
n	G14	HT1_RX_CADP12	-5000.00	12000.00
n	G15	HT1_RX_CADP13	-4000.00	12000.00
n	F12	HT1_RX_CADP14	-7000.00	13000.00
n	F11	HT1_RX_CADP15	-8000.00	13000.00
n	E17	HT1_RX_CLKN0	-2000.00	14000.00
n	D12	HT1_RX_CLKN1	-7000.00	15000.00
n	D17	HT1_RX_CLKP0	-2000.00	15000.00
n	D11	HT1_RX_CLKP1	-8000.00	15000.00
n	B12	HT1_RX_CTLN0	-7000.00	17000.00
n	B10	HT1_RX_CTLN1	-9000.00	17000.00
n	A12	HT1_RX_CTLP0	-7000.00	18000.00
n	C10	HT1_RX_CTLP1	-9000.00	16000.00
n	G01	HT1_TX_CADN00	-18000.00	12000.00
n	F02	HT1_TX_CADN01	-17000.00	13000.00
n	E02	HT1_TX_CADN02	-17000.00	14000.00
n	C02	HT1_TX_CADN03	-17000.00	16000.00
n	F04	HT1_TX_CADN04	-15000.00	13000.00
n	D04	HT1_TX_CADN05	-15000.00	15000.00
n	A03	HT1_TX_CADN06	-16000.00	18000.00
n	F06	HT1_TX_CADN07	-13000.00	13000.00
n	D05	HT1_TX_CADN08	-14000.00	15000.00
n	B06	HT1_TX_CADN09	-13000.00	17000.00
n	E07	HT1_TX_CADN10	-12000.00	14000.00
n	A06	HT1_TX_CADN11	-13000.00	18000.00
n	D07	HT1_TX_CADN12	-12000.00	15000.00
n	E09	HT1_TX_CADN13	-10000.00	14000.00
n	B07	HT1_TX_CADN14	-12000.00	17000.00
n	F10	HT1_TX_CADN15	-9000.00	13000.00
n	G02	HT1_TX_CADP00	-17000.00	12000.00
n	F01	HT1_TX_CADP01	-18000.00	13000.00
n	E01	HT1_TX_CADP02	-18000.00	14000.00
n	C01	HT1_TX_CADP03	-18000.00	16000.00
n	G04	HT1_TX_CADP04	-15000.00	12000.00
n	D03	HT1_TX_CADP05	-16000.00	15000.00
n	B03	HT1_TX_CADP06	-16000.00	17000.00
n	G06	HT1_TX_CADP07	-13000.00	12000.00
n	E05	HT1_TX_CADP08	-14000.00	14000.00
n	C06	HT1_TX_CADP09	-13000.00	16000.00
n	F07	HT1_TX_CADP10	-12000.00	13000.00
n	A05	HT1_TX_CADP11	-14000.00	18000.00
n	D08	HT1_TX_CADP12	-11000.00	15000.00
n	D09	HT1_TX_CADP13	-10000.00	15000.00

Net/Pwr	Pin Number	Net Name	X Coord	Y Coord
n	A07	HT1_TX_CADP14	-12000.00	18000.00
n	G10	HT1_TX_CADP15	-9000.00	12000.00
n	D02	HT1_TX_CLKN0	-17000.00	15000.00
n	G08	HT1_TX_CLKN1	-11000.00	12000.00
n	D01	HT1_TX_CLKP0	-18000.00	15000.00
n	F08	HT1_TX_CLKP1	-11000.00	13000.00
n	A04	HT1_TX_CTLN0	-15000.00	18000.00
n	A08	HT1_TX_CTLN1	-11000.00	18000.00
n	B04	HT1_TX_CTLP0	-15000.00	17000.00
n	B08	HT1_TX_CTLP1	-11000.00	17000.00
n	A09	HT1CLKN	-10000.00	18000.00
n	A10	HT1CLKP	-9000.00	18000.00
n	K37	I2C0_SCL	18000.00	9000.00
n	L37	I2C0_SDA	18000.00	8000.00
n	Y02	I2C1_SCL	-17000.00	-1000.00
n	Y01	I2C1_SDA	-18000.00	-1000.00
n	M01	I3CC_EN	-18000.00	7000.00
n	AR23	M00_A00	4000.00	-16000.00
n	AP20	M00_A01	1000.00	-15000.00
n	AR20	M00_A02	1000.00	-16000.00
n	AU18	M00_A03	-1000.00	-18000.00
n	AT18	M00_A04	-1000.00	-17000.00
n	AR18	M00_A05	-1000.00	-16000.00
n	AU17	M00_A06	-2000.00	-18000.00
n	AR17	M00_A07	-2000.00	-16000.00
n	AT17	M00_A08	-2000.00	-17000.00
n	AT16	M00_A09	-3000.00	-17000.00
n	AR24	M00_A10	5000.00	-16000.00
n	AU16	M00_A11	-3000.00	-18000.00
n	AP18	M00_A12	-1000.00	-15000.00
n	AU27	M00_A13	8000.00	-18000.00
n	AP27	M00_A17	8000.00	-15000.00
n	AU14	M00_ACTN	-5000.00	-18000.00
n	AU15	M00_ALERTN	-4000.00	-18000.00
n	AU24	M00_BA0	5000.00	-18000.00
n	AT24	M00_BA1	5000.00	-17000.00
n	AP17	M00_BG0	-2000.00	-15000.00
n	AT15	M00_BG1	-4000.00	-17000.00
n	AU26	M00_CASN	7000.00	-18000.00
n	AP11	M00_CB0	-8000.00	-15000.00
n	AR11	M00_CB1	-8000.00	-16000.00
n	AU12	M00_CB2	-7000.00	-18000.00



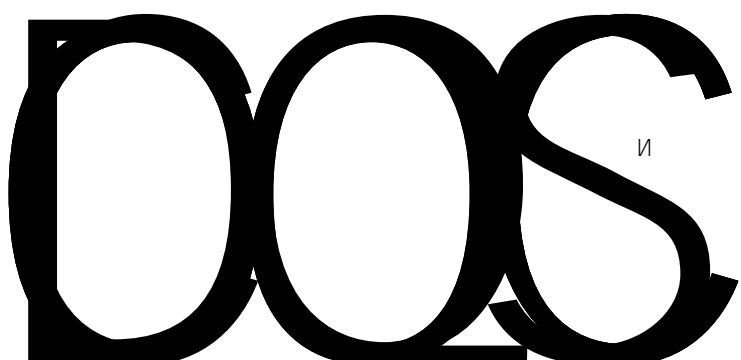
Net/Pwr	Pl n Number	Net Name	X Coord	Y Coord
n	AT12	MC0_CB7	-7000.00	-17000.00
n	AU28	MC0_CI D2	9000.00	-18000.00
n	AU13	MC0_CKE0	-6000.00	-18000.00
n	AP15	MC0_CKE1	-4000.00	-15000.00
n	AT14	MC0_CKE2	-5000.00	-17000.00
n	AT13	MC0_CKE3	-6000.00	-17000.00
n	AT20	MC0_CKN0	1000.00	-17000.00
n	AT19	MC0_CKN1	0.00	-17000.00
n	AT21	MC0_CKN2	2000.00	-17000.00
n	AP21	MC0_CKN3	2000.00	-15000.00
n	AU20	MC0_CKP0	1000.00	-18000.00
n	AU19	MC0_CKP1	0.00	-18000.00
n	AU21	MC0_CKP2	2000.00	-18000.00
n	AR21	MC0_CKP3	2000.00	-16000.00
n	AJ02	MC0_DM0N_D0SP09	-17000.00	-10000.00
n	AN02			

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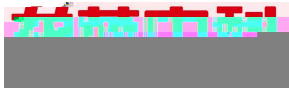
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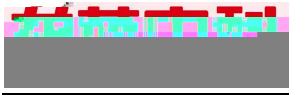


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Net/Pwr	Pl n Number	Net Name	X Coord	Y Coord
n	AT04	MC0_D023	-15000.00	-17000.00
n	AP07	MC0_D024	-12000.00	-15000.00
n	AR07	MC0_D025	-12000.00	-16000.00
n	AU08	MC0_D026	-11000.00	-18000.00
n	AR08	MC0_D027	-11000.00	-16000.00
n	AT05	MC0_D028	-14000.00	-17000.00
n	AU05	MC0_D029	-14000.00	-18000.00
n	AP09	MC0_D030	-10000.00	-15000.00
n	AT08	MC0_D031	-11000.00	-17000.00
n	AR30	MC0_D032	11000.00	-16000.00
n	AP30	MC0_D033	11000.00	-15000.00
n	AU33	MC0_D034	14000.00	-18000.00
n	AR33	MC0_D035	14000.00	-16000.00
n	AU30	MC0_D036	11000.00	-18000.00
n	AT30	MC0_D037	11000.00	-17000.00
n	AP32	MC0_D038	13000.00	-15000.00
n	AT33	MC0_D039	14000.00	-17000.00
n	AT34	MC0_D040	15000.00	-17000.00
n	AR34	MC0_D041	15000.00	-16000.00
n	AR35	MC0_D042	16000.00	-16000.00
n	AR37	MC0_D043	18000.00	-16000.00
n	AP33	MC0_D044	14000.00	-15000.00
n	AU34	MC0_D045	15000.00	-18000.00
n	AT36	MC0_D046	17000.00	-17000.00
n	AR36	MC0_D047	17000.00	-16000.00
n	AP37	MC0_D048	18000.00	-15000.00
n	AN34	MC0_D049	15000.00	-14000.00
n	AL36	MC0_D050	17000.00	-12000.00
n	AL37	MC0_D051	18000.00	-12000.00
n	AN35	MC0_D052	16000.00	-14000.00
n	AP36	MC0_D053	17000.00	-15000.00
n	AN87	MC0_D054	18000.00	-13000.00
n	AN86	MC0_D055	17000.00	-13000.00
n	AK37	MC0_D056	18000.00	-11000.00
n	AJ34	MC0_D057	15000.00	-10000.00
n	AG36	MC0_D058	17000.00	-8000.00
n	AG37	MC0_D059	18000.00	-8000.00
n	AK35	MC0_D060	16000.00	-11000.00
n	AK36	MC0_D061	17000.00	-11000.00
n	AH37	MC0_D062	18000.00	-9000.00
n	AH36	MC0_D063	17000.00	-9000.00
n	AK03	MC0_D0SN00	-16000.00	-11000.00
n	AN03	MC0_D0SN01	-16000.00	-14000.00
n	AT03	MC0_D0SN02	-16000.00	-17000.00
n	AT07	MC0_D0SN03	-12000.00	-17000.00
n	AT32	MC0_D0SN04	13000.00	-17000.00



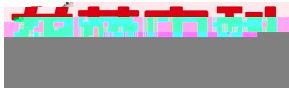




Net/Pwr	Pin Number	Net Name	X Coord	Y Coord
n	AK14	MC1_ODT2	-5000.00	-11000.00
n	AN18	MC1_ODT3	-1000.00	-14000.00
n	AM7	MC1_PAR	-2000.00	-13000.00
n	AL15	MC1_RASN	-4000.00	-12000.00
n	AL18	MC1_RESETN	-1000.00	-12000.00
n	AK29	MC1_REXT	10000.00	-11000.00
n	AM4	MC1_SCSN0	-5000.00	-13000.00
n	AM2	MC1_SCSN1	-7000.00	-13000.00
n	AN11	MC1_SCSN2	-8000.00	-14000.00
n	AK11	MC1_SCSN3	-8000.00	-11000.00
n	AK15	MC1_SCSN4	-4000.00	-11000.00
n	AM8	MC1_SCSN5	-1000.00	-13000.00
n	AK18	MC1_SCSN6	-1000.00	-11000.00
n	AL11	MC1_SCSN7	-8000.00	-12000.00
n	AN15	MC1_VEN	-4000.00	-14000.00
n	M03	NMIN	-16000.00	7000.00
n	M02	NODE_I D0	-17000.00	7000.00
n	N07	NODE_I D1	-12000.00	6000.00
n	N04	NODE_I D2	-15000.00	6000.00
n	V06	SE00	17000.00	0.00
n	V34	SE01	15000.00	1000.00
n	V33	SE02	14000.00	1000.00
n	V35	SE03	16000.00	1000.00
n	V37	SE04	18000.00	1000.00
n	V04	SE05	15000.00	0.00
n	V36	SE06	17000.00	1000.00
n	V02	SE07	13000.00	0.00
n	V03	SE08	14000.00	0.00
n	V05	SE09	16000.00	0.00
n	V07	SE10	18000.00	0.00
n	P36	SE11	17000.00	5000.00
n	P35	SE12	16000.00	5000.00
n	P37	SE13	18000.00	5000.00
n	R33	SE14	14000.00	4000.00
n	R34	SE15	15000.00	4000.00
n	R36	SE16	17000.00	4000.00
n	R37	SE17	18000.00	4000.00
n	R35	SE18	16000.00	4000.00
n	P34	SE19	15000.00	5000.00
n	P33	SE20	14000.00	5000.00
n	P32	SE21	13000.00	5000.00
n	N35	SE22	16000.00	6000.00
n	N37	SE23	18000.00	6000.00
n	N36	SE24	17000.00	6000.00
n	T35	SE25	16000.00	3000.00
n	U33	SE26	14000.00	2000.00

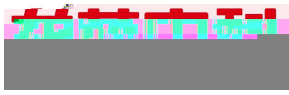


Net/Pwr	Pin Number	Net Name	X Coord	Y Coord
n	T37	SE27	18000.00	3000.00
n	U34	SE28	15000.00	2000.00
n	U35	SE29	16000.00	2000.00
n	U37	SE30	18000.00	2000.00
n	U36	SE31	17000.00	2000.00
n	V32	SE32	13000.00	1000.00
n	T33	SE33	14000.00	3000.00
n	T34	SE34	15000.00	3000.00
n	T32	SE35	13000.00	3000.00
n	T36	SE36	17000.00	3000.00
n	N34	SE37	15000.00	6000.00
n	M85	SE38	16000.00	7000.00
n	N33	SE39	14000.00	6000.00
n	M87	SE40	18000.00	7000.00
n	M82	SE41	13000.00	7000.00
n	M83	SE42	14000.00	7000.00
n	M86	SE43	17000.00	7000.00
n	M84	SE44	15000.00	7000.00
n	L01	SPI_CSN	-18000.00	8000.00
n	L07	SPI_HOLDN	-12000.00	8000.00
n	L02	SPI_SCK	-17000.00	8000.00
n	L06	SPI_SDI	-13000.00	8000.00
n	L03	SPI_SDO	-16000.00	8000.00
n	M06	SPI_VPN	-13000.00	7000.00
n	T06	SYSCLK	-13000.00	3000.00
n	T05	SYSRESETN	-14000.00	3000.00
n	V01	TCK	-18000.00	0.00
n	V02	TDI	-17000.00	0.00
n	V03	TDO	-16000.00	0.00
n	V04	TESTCLK	-15000.00	0.00
n	Y06	TM8	-13000.00	-1000.00
n	Y07	TRSTN	-12000.00	-1000.00
n	V06	TSELO	-13000.00	0.00
n	Y03	TSEL1	-16000.00	-1000.00
n	M05	UART_RXD	-14000.00	7000.00
n	M04	UART_TXD	-15000.00	7000.00
n_pll	AB08	PLL_DDR_AVDD	-11000.00	-3000.00
n_pll	AB05	PLL_DDR_AVSS	-14000.00	-3000.00
n_pll	AB07	PLL_DDR_DVDD	-12000.00	-3000.00
n_pll	AB06	PLL_DDR_DVSS	-13000.00	-3000.00
n_pll	AA01	PLL_DDRPHY_VDD	-18000.00	-2000.00
n_pll	AA02	PLL_DDRPHY_VDD	-17000.00	-2000.00
n_pll	AA03	PLL_DDRPHY_VDD	-16000.00	-2000.00
n_pll	AA04	PLL_DDRPHY_VDD	-15000.00	-2000.00
n_pll	AA05	PLL_DDRPHY_VSS	-14000.00	-2000.00
n_pll	AA06	PLL_DDRPHY_VSS	-13000.00	-2000.00



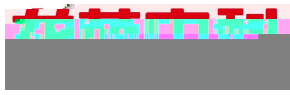
3A5000/3B5000

Net/Pwr	Pin Number	Net Name	X Coord	Y Coord
n_zm				



Net/Pwr	Pl n Number	Net Name	X Coord	Y Coord
p	H21	VDDE_1V2R	2000.00	11000.00
p	H22	VDDE_1V2R	3000.00	11000.00
p	H24	VDDE_1V2R	5000.00	11000.00
p	H25	VDDE_1V2R	6000.00	11000.00
p	H26	VDDE_1V2R	7000.00	11000.00
p	H27	VDDE_1V2R	8000.00	11000.00
p	B02	VDDE_1V2T	-17000.00	17000.00
p	B05	VDDE_1V2T	-14000.00	17000.00
p	B09	VDDE_1V2T	-10000.00	17000.00
p	B29	VDDE_1V2T	10000.00	17000.00
p	B33	VDDE_1V2T		

Net/Pwr	Pl n Number	Net Name	X Coord	Y Coord
p	T31		12000.00	3000.00
p	U30	VDDE_1V8	11000.00	2000.00
p	U31	VDDE_1V8	12000.00	2000.00
p	V31	VDDE_1V8	12000.00	1000.00
p	AF14	VDDE_DDR	-5000.00	-7000.00
p	AF15	VDDE_DDR	-4000.00	-7000.00
p	AF18	VDDE_DDR	-1000.00	-7000.00
p	AF20	VDDE_DDR	1000.00	-7000.00
p	AF23	VDDE_DDR	4000.00	-7000.00
p	AF24	VDDE_DDR	5000.00	-7000.00
p	AF26	VDDE_DDR	7000.00	-7000.00
p	AF27	VDDE_DDR	8000.00	-7000.00
p	AG13	VDDE_DDR	-6000.00	-8000.00
p	AG14	VDDE_DDR	-5000.00	-8000.00
p	AG17	VDDE_DDR	-2000.00	-8000.00
p	AG18	VDDE_DDR	-1000.00	-8000.00
p	AG20	VDDE_DDR	1000.00	-8000.00
p	AG21	VDDE_DDR	2000.00	-8000.00
p	AG24	VDDE_DDR	5000.00	-8000.00
p	AG25	VDDE_DDR	6000.00	-8000.00
p	AK13	VDDE_DDR	-6000.00	-11000.00
p	AK16	VDDE_DDR	-3000.00	-11000.00
p	AK19	VDDE_DDR	0.00	-11000.00
p	AK24	VDDE_DDR	5000.00	-11000.00
p	AK25	VDDE_DDR	6000.00	-11000.00
p	AK26	VDDE_DDR	7000.00	-11000.00
p	AK27	VDDE_DDR	8000.00	-11000.00
p	AK28	VDDE_DDR	9000.00	-11000.00
p	AL13	VDDE_DDR	-6000.00	-12000.00
p	AL16	VDDE_DDR	-3000.00	-12000.00
p	AL19	VDDE_DDR	0.00	-12000.00
p	AL22	VDDE_DDR	3000.00	-12000.00
p	AM3	VDDE_DDR	-6000.00	-13000.00
p	AM6	VDDE_DDR	-3000.00	-13000.00
p	AM9	VDDE_DDR	0.00	-13000.00
p	AN22	VDDE_DDR	3000.00	-13000.00
p	AN25	VDDE_DDR	6000.00	-13000.00
p	AN28	VDDE_DDR	9000.00	-13000.00
p	AN13	VDDE_DDR	-6000.00	-14000.00
p	AN16	VDDE_DDR	-3000.00	-14000.00
p	AN19	VDDE_DDR	0.00	-14000.00
p	AN22	VDDE_DDR	3000.00	-14000.00
p	AN25	VDDE_DDR	6000.00	-14000.00
p	AN28	VDDE_DDR	9000.00	-14000.00
p	AP13			



Net/Pwr	Pin Number	Net Name	X Coord	Y Coord
p	AP19	VDDE_DDR	0.00	-15000.00
p	AP22	VDDE_DDR	3000.00	-15000.00
p	AP25	VDDE_DDR	6000.00	-15000.00
p	AP28	VDDE_DDR	9000.00	-15000.00
p	AP29	VDDE_DDR	10000.00	-15000.00
p	AR12	VDDE_DDR	-7000.00	-16000.00
p	AR13	VDDE_DDR	-6000.00	-16000.00
p	AR15	VDDE_DDR	-4000.00	-16000.00
p	AR16	VDDE_DDR	-3000.00	-16000.00
p	AR19	VDDE_DDR	0.00	-16000.00
p	AR22	VDDE_DDR	3000.00	-16000.00
p	AR25	VDDE_DDR	6000.00	-16000.00
p	AR26	VDDE_DDR	7000.00	-16000.00
p	AR28	VDDE_DDR	9000.00	-16000.00
p	L04	VDDE_I/O	-15000.00	8000.00
p	L05	VDDE_I/O	-14000.00	8000.00
p	L08	VDDE_I/O	-11000.00	8000.00
p	L11	VDDE_I/O	-8000.00	8000.00
p	L12	VDDE_I/O	-7000.00	8000.00
p	M07	VDDE_I/O	-12000.00	7000.00
p	M1	VDDE_I/O	-8000.00	7000.00
p	N05	VDDE_I/O	-14000.00	6000.00
p	P04	VDDE_I/O	-15000.00	5000.00
p	P11	VDDE_I/O	-8000.00	5000.00
p	U04	VDDE_I/O	-15000.00	2000.00
p	V05	VDDE_I/O	-14000.00	1000.00
p	V07		-12000.00	0.00
p	Y04	VDDE_I/O	-15000.00	-1000.00
p	Y05	VDDE_I/O	-14000.00	-1000.00
p	Y08	VDDE_I/O	-11000.00	-1000.00
p	AA30	NC	11000.00	-2000.00
p	AA31	NC	12000.00	-2000.00
p	AD07			

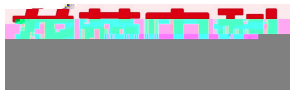
v



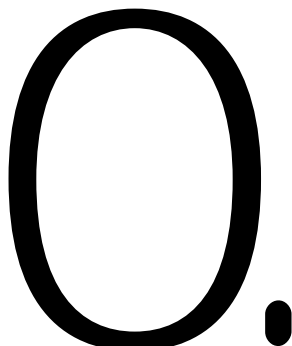
Net/Pwr	Pl n Number	Net Name	X Coord	Y Coord
p	AB23	VDDN	4000.00	-3000.00
p	AB24	VDDN	5000.00	-3000.00
p	AC13	VDDN	-6000.00	-4000.00
p	AC14	VDDN	-5000.00	-4000.00
p	AC19	VDDN	0.00	-4000.00
p	AC24	VDDN	5000.00	-4000.00
p	AC25	VDDN	6000.00	-4000.00
p	N14	VDDN	-5000.00	6000.00
p	N15	VDDN	-4000.00	6000.00
p	N23	VDDN	4000.00	6000.00
p	N24	VDDN	5000.00	6000.00
p	N27	VDDN	8000.00	6000.00
p	P13	VDDN	-6000.00	5000.00
p	P14	VDDN	-5000.00	5000.00
p	P19	VDDN	0.00	5000.00
p	P22	VDDN	3000.00	5000.00
p	P23	VDDN	4000.00	5000.00
p	P25			



Net/Pwr	Pl n Number	Net Name	X Coord	Y Coord
p	U25	VDDN	6000.00	2000.00
p	V15	VDDN	-4000.00	1000.00
p	V16	VDDN	-3000.00	1000.00
p	V18	VDDN	-1000.00	1000.00
p	V19	VDDN	0.00	1000.00
p	V21	VDDN	2000.00	1000.00
p	V22	VDDN	3000.00	1000.00
p	V24	VDDN	5000.00	1000.00
p	V14	VDDN	-5000.00	0.00
p	V15	VDDN	-4000.00	0.00
p	V17	VDDN	-2000.00	0.00
p	V18	VDDN	-1000.00	0.00
p	V20	VDDN	1000.00	0.00
p	V21	VDDN	2000.00	0.00
p	V23	VDDN	4000.00	0.00
p	V24	VDDN	5000.00	0.00
p	Y14	VDDN	-5000.00	-1000.00
p	Y16	VDDN	-3000.00	-1000.00
p	Y17	VDDN	-2000.00	-1000.00
p	Y19	VDDN	0.00	-1000.00
p	Y20	VDDN	1000.00	-1000.00
p	Y22	VDDN	3000.00	-1000.00
p	Y23	VDDN	4000.00	-1000.00
p	Y25	VDDN	6000.00	-1000.00
p	AB12	VDDP	-7000.00	-3000.00
p	AB17	VDDP	-2000.00	-3000.00
p	AB21	VDDP	2000.00	-3000.00
p	AB26	VDDP	7000.00	-3000.00
p	AC16	VDDP	-3000.00	-4000.00
p	AC17	VDDP	-2000.00	-4000.00
p	AC21	VDDP	2000.00	-4000.00
p	AC22	VDDP	3000.00	-4000.00
p	AD11	VDDP	-8000.00	-5000.00
p	AD12	VDDP	-7000.00	-5000.00
p	AD15	VDDP	-4000.00	-5000.00
p	AD18	VDDP	-1000.00	-5000.00
p	AD20	VDDP	1000.00	-5000.00
p	AD23	VDDP	4000.00	-5000.00
p	AD26	VDDP	7000.00	-5000.00
p	AD27	VDDP	8000.00	-5000.00
p	AE13	VDDP	-6000.00	-6000.00
p	AE14	VDDP	-5000.00	-6000.00
p	AE16	VDDP	-3000.00	-6000.00
p	AE17	VDDP	-2000.00	-6000.00
p	AE21	VDDP	2000.00	-6000.00
p	AE22	VDDP	3000.00	-6000.00



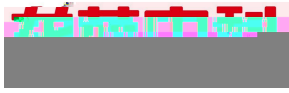
Net/Pwr	Pin Number	Net Name	X Coord	Y Coord
p	AE24	VDDP	5000.00	-6000.00
p	AE25	VDDP	6000.00	-6000.00
p	L14	VDDP	-5000.00	8000.00
p	L16	VDDP	-3000.00	8000.00
p	L22	VDDP	3000.00	8000.00
p	L23		4000.00	8000.00
p	L25	VDDP	6000.00	8000.00
p	M3		-6000.00	7000.00
p	M5		-4000.00	7000.00
p	M6	VDDP	-3000.00	7000.00
p	M8	VDDP	-1000.00	7000.00
Ø	M9	VDDP	0.00	7000.00
Ø	M21	VDDP	2000.00	7000.00
p	M22	VDDP	3000.00	7000.00
p	M24	VDDP	5000.00	7000.00
p	M25	VDDP	6000.00	7000.00
p	M27	VDDP	8000.00	7000.00
p	N12	VDDP	-7000.00	6000.00
p	N17	VDDP	-2000.00	6000.00
p	N18	VDDP	-1000.00	6000.00
p	N20	VDDP	1000.00	6000.00
p	N21	VDDP	2000.00	6000.00
p	N26	VDDP	7000.00	6000.00
p	P17	VDDP	-2000.00	5000.00
p	P20	VDDP	1000.00	5000.00
p	R12	VDDP	-7000.00	4000.00
p	T11	VDDP	-8000.00	3000.00
p	T12	VDDP	-7000.00	3000.00
p	V13	VDDP	-6000.00	1000.00
p	V25	VDDP	6000.00	1000.00
p	V12	VDDP	-7000.00	0.00
p	V26	VDDP	7000.00	0.00
p	A36	VSS	17000.00	18000.00
p	AA14	VSS	-5000.00	-2000.00
p	AA17	VSS	-2000.00	-2000.00
p	AA20	VSS	1000.00	-2000.00
p	AA23	VSS	4000.00	-2000.00
p	AA25	VSS	6000.00	-2000.00
p	AA32		13000.00	-2000.00
p	AA33	VSS	14000.00	





Net/Pwr	Pl n Number	Net Name	X Coord	Y Coord
p	AB22	VSS	3000.00	-3000.00
p	AB25	VSS	6000.00	-3000.00
p	AB27	VSS	8000.00	-3000.00
p	AB35	VSS	16000.00	-3000.00
p	AC03	VSS	-16000.00	-4000.00
p	AC04	VSS	-15000.00	-4000.00
p	AC11	VSS	-8000.00	-4000.00
p	AC12	VSS	-7000.00	-4000.00
p	AC15	VSS	-4000.00	-4000.00
p	AC18	VSS	-1000.00	-4000.00
p	AC20	VSS	1000.00	-4000.00
p	AC23	VSS	4000.00	-4000.00
p	AC26	VSS	7000.00	-4000.00
p	AC27	VSS	8000.00	-4000.00
p	AD04	VSS	-15000.00	-5000.00
p	AD05	VSS	-14000.00	-5000.00
p	AD06	VSS	-13000.00	-5000.00
p	AD13	VSS	-6000.00	-5000.00
p	AD14	VSS	-5000.00	-5000.00
p	AD16	VSS	-3000.00	-5000.00
p	AD17	VSS	-2000.00	-5000.00
p	AD19	VSS	0.00	-5000.00
p	AD21	VSS	2000.00	-5000.00
p	AD22	VSS	3000.00	-5000.00
p	AD24	VSS	5000.00	-5000.00
p	AD25	VSS	6000.00	-5000.00
p	AD30	VSS	11000.00	-5000.00
p	AD31	VSS	12000.00	-5000.00
p	AD32	VSS	13000.00	-5000.00
p	AD33	VSS	14000.00	-5000.00
p	AD34	VSS	15000.00	-5000.00
p	AE03	VSS	-16000.00	-6000.00
p	AE11	VSS	-8000.00	-6000.00
p	AE12	VSS	-7000.00	-6000.00
p	AE15	VSS	-4000.00	-6000.00
p	AE18	VSS	-1000.00	-6000.00
p	AE19	VSS	0.00	-6000.00
p	AE20	VSS	1000.00	-6000.00
p	AE23	VSS	4000.00	-6000.00
p	AE26	VSS	7000.00	-6000.00
p	AE27	VSS	8000.00	-6000.00
p	AE34	VSS	15000.00	-6000.00
p	AE35	VSS	16000.00	-6000.00
p	AF11	VSS	-8000.00	-7000.00
p	AF12	VSS	-7000.00	-7000.00
p	AF13	VSS	-6000.00	-7000.00

Net/Pwr	Pl n Number	Net Name	X Coord	Y Coord
p	AF16	VSS	-3000.00	-7000.00
p	AF17	VSS	-2000.00	-7000.00
p	AF19	VSS	0.00	-7000.00
p	AF21	VSS	2000.00	-7000.00
p	AF22	VSS	3000.00	-7000.00
p	AF25	VSS	6000.00	-7000.00
p	AG03	VSS	-16000.00	-8000.00
p	AG04	VSS	-15000.00	-8000.00
p	AG05	VSS	-14000.00	-8000.00
p	AG06	VSS	-13000.00	-8000.00
p	AG07	VSS	-12000.00	-8000.00
p	AG08	VSS	-11000.00	-8000.00
p	AG11			

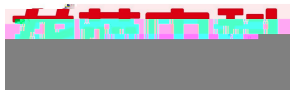


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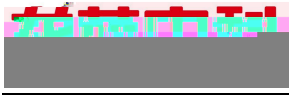
Net/Pwr

Pl n Number

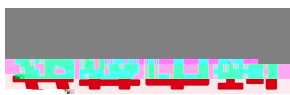
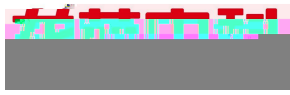




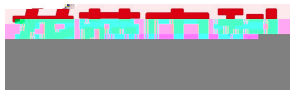
Net/Pwr	Pl n Number	Net Name	X Coord	Y Coord
p	F17	VSS	-2000.00	13000.00
p	F19	VSS	0.00	13000.00
p	F21	VSS	2000.00	13000.00
p	F23	VSS	4000.00	13000.00
p	F25	VSS	6000.00	13000.00
p	F35	VSS	16000.00	13000.00
p	G03	VSS	-16000.00	12000.00
p	G13	VSS	-6000.00	12000.00
p	G17	VSS	-2000.00	12000.00
p	G19	VSS	0.00	12000.00
p	G21	VSS	2000.00	12000.00
p	G25	VSS	6000.00	12000.00
p	G35	VSS	16000.00	12000.00
p	H06	VSS	-13000.00	11000.00
p	H07	VSS	-12000.00	11000.00
p	H08	VSS	-11000.00	11000.00
p	H09	VSS	-10000.00	11000.00
p	H10	VSS	-9000.00	11000.00
p	H19	VSS	0.00	11000.00
p	H28	VSS	9000.00	11000.00
p	H29	VSS	10000.00	11000.00
p	H30	VSS	11000.00	11000.00
p	H31	VSS	12000.00	11000.00
p	J06	VSS	-13000.00	10000.00
p	J07	VSS	-12000.00	10000.00
p	J08	VSS	-11000.00	10000.00
p	J30	VSS	11000.00	10000.00
p	J31	VSS	12000.00	10000.00
p	J32	VSS	13000.00	10000.00
p	J33	VSS	14000.00	10000.00
p	K05	VSS	-14000.00	9000.00
p	K06	VSS	-13000.00	9000.00
p	K07	VSS	-12000.00	9000.00
p	K08	VSS	-11000.00	9000.00
p	L13	VSS	-6000.00	8000.00
p	L15	VSS	-4000.00	8000.00
p	L17	VSS	-2000.00	8000.00
p	L18	VSS	-1000.00	8000.00
p	L20	VSS	1000.00	8000.00
p	L21	VSS	2000.00	8000.00
p	L24	VSS	5000.00	8000.00
p	L26	VSS	7000.00	8000.00
p	L27	VSS	8000.00	8000.00
p	L30	VSS	11000.00	8000.00
p	L31	VSS	12000.00	8000.00
p	L32	VSS	13000.00	8000.00



Net/Pwr Pin Nhn

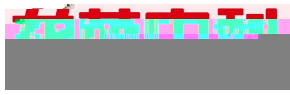


3A5000/3B5000



	\$*	\$+	\$,	\$-	%\$
5	HT1_TX_CADN11	HT1_TX_CADP14	HT1_TX_CTLN1	HT1CLKN	HT1CLKP
6	HT1_TX_CADN09	HT1_TX_CADN14	HT1_TX_CTLP1	VDDE_1V2T	HT1_RX_CTLN1
7	HT1_TX_CADP09	VSS	VSS	VDDE_1V2T	HT1_RX_CTLP1
8	VDDE_1V2T	HT1_TX_CADN12	HT1_TX_CADP12	HT1_TX_CADP13	VSS
9	VDDE_1V2T	HT1_TX_CADN10	VDDE_1V2T	HT1_TX_CADN13	VSS
:	HT1_TX_CADN07	HT1_TX_CADP10	HT1_TX_CLKP1	VDDE_1V2T	HT1_TX_CADN15
;	HT1_TX_CADP07	VDDE_1V2T	HT1_TX_CLKN1	VDDE_1V2T	HT1_TX_CADP15
<	VSS	VSS	VSS	VSS	VSS
>	VSS	VSS	VSS		
?	VSS	VSS	VSS		
@	SPI_SDI	SPI_HOLDN	VDDE_1V8		
A	SPI_WPN	VDDE_1V8	VSS		
B	CH1_P_CONF1G0	NODE_I D1	VSS		
D	CLKSEL00	CH1_P_CONF1G4	VSS		
F	CLKSEL04	VSS	VSS		
H	SYSCLK	VSS	VSS		
I	GPI004	GPI005	VSS		
J	GPI010	GPI011	VSS		
K	TSEL0	VDDE_1V8	VSS		
M	TM\$	TRSTN	VDDE_1V8		
55	PLL_DDRPHY_VSS	PLL_DDRPHY_VSS	PLL_DDRPHY_VSS		
56	PLL_DDR_AVSS	PLL_DDR_AVDD	PLL_DDR_AVDD		
57	MC1_D059	MC1_D058	MC1_D063		
58	VSS	MC1_VREF	MC0_VREF		
59	MC1_D061	MC1_D060	MC1_D057		
5:	MC1_D049	MC1_D052	MC1_D053		
5;	VSS	VSS	VSS		
5<	MC1_D0SNO5	MC1_D047	MC1_D040		
5>	MC1_D0SN14	MC1_D046	MC1_D041		
5?	VSS	VSS	MC1_D0SP04	MC1_D036	VSS
5@	MC1_D034	VSS	MC1_D0SNO4	MC1_D033	VSS
5A	MC1_D039	VSS	MC1_DM#N_D0SP13	MC1_D037	VSS
5B	MC1_D038	VSS	MC1_D0SNO13	MC1_D032	VSS
5D	VSS	MC0_D024	VSS	MC0_D030	VSS
5F	VSS	MC0_D025	MC0_D027	VSS	VSS
5H	MC0_D0SNO12	MC0_D0SNO3	MC0_D031	MC0_CB4	MC0_D0SNO17
5I	MC0_DM#N_D0SP12	MC0_D0SP03	MC0_D026	MC0_CB5	MC0_DM#N_D0SP17

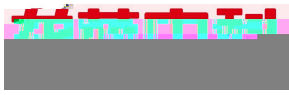
3A5000/3B5000



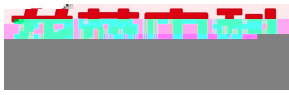
	%	%+	%	%	&\$
5	HT1_RX_CADP04	HT1_RX_CADN03	HT1_RX_CADP03	HT1_RX_CADN00	HT0_RX_CADP03
6	HT1_RX_CADN04	VDDE_1V2R	HT1_RX_CADN01	HT1_RX_CADP00	HT0_RX_CADN01
7	VSS	VDDE_1V2R	HT1_RX_CADP01	VSS	HT0_RX_CADP01
8	HT1_RX_CADP10	HT1_RX_CLKP0	VDDE_1V2R	HT0_RX_CADN00	VDDE_1V2R
9	VSS	HT1_RX_CLKN0	VDDE_1V2R	HT0_RX_CADP00	VDDE_1V2R
:	HT1_RX_CADP07	VSS	HT1_RX_CADP02	VSS	HT0_RX_CADP02
;	HT1_RX_CADN07	VSS	HT1_RX_CADN02	VSS	HT0_RX_CADN02
<	VDDE_1V2R	VDDE_1V2R	VDDE_1V2R	VSS	VDDE_1V2R
>					
?					
@	VDDP	VSS	VSS	NC_POR_3V3	VSS
A	VDDP	VSS	VDDP	VDDP	VSS
B	VSS	VDDP	VDDP	VSS	VDDP
D	NC_OTP4K_1V8	VDDP	VSS	VDDN	VDDP
F	VDDN	VSS	VDDN	VDDN	VSS
H	VSS	VDDN	VDDN	VSS	VDDN
I	VDDN	VDDN	VSS	VDDN	VDDN
J	VDDN	VSS	VDDN	VDDN	VSS
K	VSS	VDDN	VDDN	VSS	VDDN
M	VDDN	VDDN	VSS	VDDN	VDDN
55	VDDN	VSS	VDDN	VDDN	VSS
56	VSS	VDDMC	VDDN	VSS	VDDN
57	VDDMC	VDDMC	VSS	VDDN	VSS
58	VSS	VSS	VDDMPHY	VSS	VDDMPHY
59	VDDMPHY	VDDMPHY	VSS	VSS	VSS
5:	VSS	VSS	VDDE_DDR	VSS	VDDE_DDR
5;	VSS	VDDE_DDR	VDDE_DDR	VSS	VDDE_DDR
5<					
5>					
57	VDDE_DDR	MC1_A00	MC1_SCSN6	VDDE_DDR	MC1_CKN3
5@	VDDE_DDR	MC1_BA0	MC1_RESETN	VDDE_DDR	MC1_CKP3
5A	VDDE_DDR	MC1_PAR	MC1_SCSN5	VDDE_DDR	MC1_CKP2
5B	VDDE_DDR	MC1_BA1	MC1_ODT3	VDDE_DDR	MC1_CKN2
5D	VDDE_DDR	MC0_BG0	MC0_A12	VDDE_DDR	MC0_A01
5F	VDDE_DDR	MC0_A07	MC0_A05	VDDE_DDR	MC0_A02
5H	MC0_A09	MC0_A08	MC0_A04	MC0_CKN1	MC0_CKN0
5I	MC0_A11	MC0_A06	MC0_A03	MC0_CKP1	MC0_CKPO



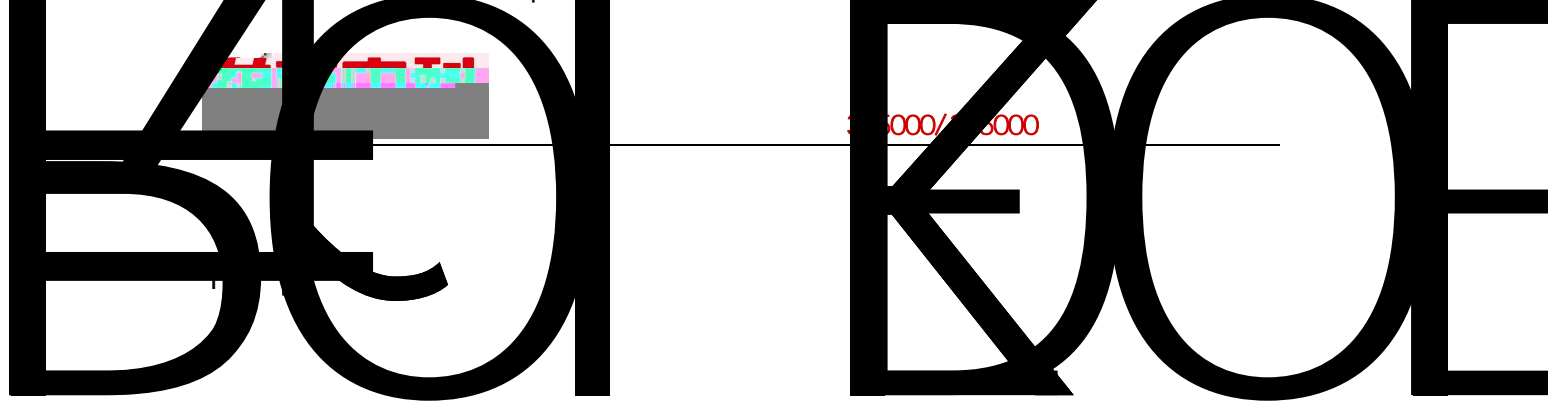
	&%	&&	&'	&(&)
5	HTO_RX_CADN03	HTO_RX_CADP04	HTO_RX_CADP05	HTO_RX_CADN06	HTO_RX_CADP06
6	VDDE_1V2R	HTO_RX_CADN04	HTO_RX_CADN05	HTO_RX_CADN08	VSS
7	VDDE_1V2R	VSS	VSS	HTO_RX_CADP08	VSS
8	HTO_RX_CLKP0	HTO_RX_CADP10	HTO_RX_CADN10	VDDE_1V2R	HTO_RX_CADP11
9	HTO_RX_CLKN0	VSS	VSS	VDDE_1V2R	HTO_RX_CADN11
:	VSS	HTO_RX_CADP07	VSS	HTO_RX_CADN12	VSS
;	VSS	HTO_RX_CADN07	HTO_RX_CADP13	HTO_RX_CADP12	VSS
<	VDDE_1V2R	VDDE_1V2R	HTO_RX_CADN13	VDDE_1V2R	VDDE_1V2R
>					
?					
@	VSS	VDDP	VDDP	VSS	VDDP
A	VDDP	VDDP	VSS	VDDP	VDDP
B	VDDP	VSS	VDDN	VDDN	VSS
D	VSS	VDDN	VDDN	VSS	VDDN
F	VDDN	VDDN	VSS	VDDN	VDDN
H	VDDN	VSS	VDDN	VDDN	VSS
I	VSS	VDDN	VDDN	VSS	VDDN
J	VDDN	VDDN	VSS	VDDN	VDDP
K	VDDN	VSS	VDDN	VDDN	VSS
M	VSS	VDDN	VDDN	VSS	VDDN
55	VDDN	VDDN	VSS	VDDN	VSS
56	VDDMC	VSS	VDDN	VDDN	VSS
57	VDDMC	VDDMC	VSS	VDDN	VDDN
58	VSS	VSS	VDDMPHY	VSS	VSS
59	VDDMPHY	VDDMPHY	VSS	VDDMPHY	VDDMPHY
5:	VSS	VSS	VDDE_DDR	VDDE_DDR	VSS
5;	VDDE_DDR	VSS	VSS	VDDE_DDR	VDDE_DDR
5<					
5>					
57	MC1_CKN0	MC1_A03	MC1_A08	VDDE_DDR	VDDE_DDR
5@	MC1_CKPO	VDDE_DDR	MC1_A06	MC1_A07	MC1_B00
5A	MC1_CKP1	VDDE_DDR	MC1_A01	MC1_A05	VDDE_DDR
5B	MC1_CKN1	VDDE_DDR	MC1_A02	MC1_A04	VDDE_DDR
5D	MC0_CKN3	VDDE_DDR	MC0_CDT3	MC0_RASN	VDDE_DDR
5F	MC0_CKP3	VDDE_DDR	MC0_A00	MC0_A10	VDDE_DDR
5H	MC0_CKN2	MC0_RESETN	MC0_SCSN5	MC0_BA1	MC0_VEN
5I	MC0_CKP2	MC0_SCSN6	MC0_PAR	MC0_BA0	MC0_SCSN4



	'%	'&	''	'(')
5	HTO_TX_CADP14	HTO_TX_CADN11	HTO_TX_CADP11	HTO_TX_CTLNO	HTO_TX_CADN06
6	HTO_TX_CADN14	HTO_TX_CADN09	VDDE_1V2T	HTO_TX_CTLPO	HTO_TX_CADPO6
7					



	' *	' +
5	VSS	
6	VDDE_1V2T	VSS
7	HTO_TX_CADN03	HTO_TX_CADP03
8	HTO_TX_CLKNO	HTO_TX_CLKPO
9	HTO_TX_CADN02	HTO_TX_CADP02
:	HTO_TX_CADN01	HTO_TX_CADP01
;	HTO_TX_CADP00	HTO_TX_CADN00
<	HT1_LO_POWERCK	HT1_8X2
>	HTO_8X2	HTO_HI_LDT_RECN
?	HT1_HI_POWERCK	I2CO_SCL
@	HTO_LO_LDT_RECN	I2CO_SDA
A		



10. 1.

DOTEST CLKSEL ICCC_EN NODEID CHIP_CONFIG

10. 2. GD=

SPI Flash

10. 3. =&7#I 5FH#; D=C

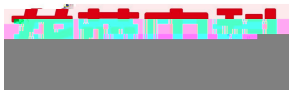
I2C UART GPIO

10. 4. 88F

DDR

10. 5. <nøYf Hf Ubgdcf h

HyperTransport



10. 6. <H S7@d#b

HT0/1_CLKp/n HT PHY
SYSCLK HT

3A5000/3B5000

10. 7. >H5; H9GH7@?

JTAG TESTCLK

10. 8.

NMn

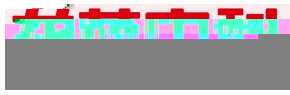
10. 9. G9

SE SE

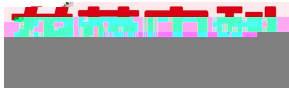
11.

Net Name	Overall I Total (um)	Net Name	Overall I Total (um)	Net Name	Overall I Total (um)
CHI_P_CONF1 G0	12783.42	HT1_TX_CLKP0	19580.85	MC1_CKN0	15985.38
CHI_P_CONF1 G1	15033.37	HT1_TX_CLKP1	19581.11	MC1_CKN1	15885.61
CHI_P_CONF1 G2	17123.33	HT1_TX_CTLN0	19589.44	MC1_CKN2	15823.08
CHI_P_CONF1 G3	16264.94	HT1_TX_CTLN1	19591.61	MC1_CKN3	15796.71
CHI_P_CONF1 G4	11860.31	HT1_TX_CTLP0	19608.8	MC1_CKPO	15995.8
CHI_P_CONF1 G5	13082.42	HT1_TX_CTLP1	19609.02	MC1_CKP1	15879.48
CLKSELO0	12508.43	I2C0_SCL	16643.32	MC1_CKP2	15841.79
CLKSELO1	14805.39	I2C0_SDA	15763.98	MC1_CKP3	15814.63
CLKSELO2	16956.85	I2C1_SCL	14457.13	MC1_DM0N_DCSP09	16956.55
CLKSELO3	16166.07	I2C1_SDA	15506.6	MC1_DM1N_DCSP10	16888.7
CLKSELO4	11844.16	I2CC_EN	17532.77	MC1_DM2N_DCSP11	18687.65
CLKSELO5	13848.34	M00_A00	16503.01	MC1_DM3N_DCSP12	19879.91
CLKSELO6	12849.67	M00_A01	16554.07	MC1_DM4N_DCSP13	16391.98
CLKSELO7	14620.02	M00_A02	16609.81	MC1_DM5N_DCSP14	17199.13
CLKSELO8	16610.38	M00_A03	16511.59	MC1_DM6N_DCSP15	16457
CLKSELO9	15921.66	M00_A04	16805.07	MC1_DM7N_DCSP16	14653.55
DOTESTN	11705.2	M00_A05	16471.16	MC1_DM8N_DCSP17	19376.66
GPI000	13708.33	M00_A06	16722.78	MC1_DC00	16959.91
GPI001	15695.21	M00_A07	16501.68	MC1_DC01	16962.1
GPI002	14427.93	M00_A08	16621.61	MC1_DC02	16974.48
GPI003	16415.37	M00_A09	16664.97	MC1_DC03	17009.16
GPI004	11563.74	M00_A10	16556.19	MC1_DC04	16953.7
GPI005	10823.99	M00_A11	16503.46	MC1_DC05	16970.34
GPI006	12054.13	M00_A12	16531.9	MC1_DC06	16978.91
GPI007	15570.37	M00_A13	16533.8	MC1_DC07	16980.42
GPI008	14118.22	M00_A17	16436.85	MC1_DC08	16821.29
GPI009	16297.35	M00_ACTN	16633.87	MC1_DC09	16817.18
GPI010	11344.19	M00_ALERTN	16599.53	MC1_DC10	16888.94
GPI011	11047.47	M00_BA0	16584.07	MC1_DC11	16820.18
GPI012	13211.12	M00_BA1	16510.27	MC1_DC12	16829.97
GPI013	15137.22	M00_BG0	16766.28	MC1_DC13	16900.93
GPI014	13860.94	M00_BG1	16421.94	MC1_DC14	16830.46
GPI015	15915.74	M00_CASN	16497.34	MC1_DC15	16885.75
HTOCLKN	17214.86	M00_CB0	16747.58	MC1_DC16	18766.79
HTOCLKP	17196.83	M00_CB1	16691.13	MC1_DC17	18724.82
HTO_8X2	15394.93	M00_CB2	16718.41	MC1_DC18	18694.36
HTO_HI_HOSTMODE	14275.75	M00_CB3	16700.19	MC1_DC19	18708.78
HTO_HI_LDT_RECN	15872.49	M00_CB4	16756.67	MC1_DC20	18693.68
HTO_HI_LDT_STOPN	10434.16	M00_CB5	16738.36	MC1_DC21	18693.62
HTO_HI_POWEROK	9677.75	M00_CB6	16730.59	MC1_DC22	18705.8

Net Name	Overall Total (um)	Net Name	Overall Total (um)	Net Name	Overall Total (um)
HTO_HI_RSTN	13471.45	MCO_CB7	16710.81	MC1_DC23	18704.29
HTO_LO_HOSTMODE	9423.4	MCO_CI D2	16560.83	MC1_DC24	19806.89
HTO_LO_LDT_RECN	14709.18	MCO_CKE0	16440.6	MC1_DC25	19834.57
HTO_LO_LDT_STOPN	12971.82	MCO_CKE1	16585.77	MC1_DC26	19838.31
HTO_LO_POWEROK	13681.71	MCO_CKE2	16420.85	MC1_DC27	19875.53
HTO_LO_RSTN	9021.37	MCO_CKE3	16585.96	MC1_DC28	19865.64
HTO_REXT	6553.59	MCO_CKN0	16578.56	MC1_DC29	19843.53
HTO_RX_CADN00	17410.68	MCO_CKN1	16415.87	MC1_DC30	19842.28
HTO_RX_CADN01	17414.38	MCO_CKN2	16594.7	MC1_DC31	19838.37
HTO_RX_CADN02	17426.04	MCO_CKN3	16432.29	MC1_DC32	16438.64
HTO_RX_CADN03	17425.87	MCO_CKPO	16595.08	MC1_DC33	16390.38
HTO_RX_CADN04	17436.87	MCO_CKP1	16429.97	MC1_DC34	16480.43
HTO_RX_CADN05	17429.1	MCO_CKP2	16605.97	MC1_DC35	16405.76
HTO_RX_CADN06	17408.71	MCO_CKP3	16421.95	MC1_DC36	16472.45
HTO_RX_CADN07	17445.94	MCO_DM0N_DCSP09	17059.97	MC1_DC37	16384.81
HTO_RX_CADN08	17432.15	MCO_DM1N_DCSP10	19639.94	MC1_DC38	16428.31
HTO_RX_CADN09	17422.35	MCO_DM2N_DCSP11	19984.35	MC1_DC39	16401.28
HTO_RX_CADN10	17427.28	MCO_DM3N_DCSP12	18269.27	MC1_DC40	17181.33
HTO_RX_CADN11	17434.57	MCO_DM4N_DCSP13	18399.86	MC1_DC41	17186.26
HTO_RX_CADN12	17425.07	MCO_DM5N_DCSP14	19887.16	MC1_DC42	17203.21
HTO_RX_CADN13	17417.93	MCO_DM6N_DCSP15	19147.54	MC1_DC43	17251.08
HTO_RX_CADN14	17431.28	MCO_DM7N_DCSP16	16714.93	MC1_DC44	17242.35
HTO_RX_CADN15	17431.53	MCO_DM8N_DCSP17	16748.36	MC1_DC45	17198.11
HTO_RX_CADP00	17427.97	MCO_D000	17065.36	MC1_DC46	17174.88
HTO_RX_CADP01	17427.52	MCO_D001	17101.81	MC1_DC47	17173.86
HTO_RX_CADP02	17441.36	MCO_D002	17057.85	MC1_DC48	16541.41
HTO_RX_CADP03	17425.35	MCO_D003	17126.3	MC1_DC49	16507.93
HTO_RX_CADP04	17435.74	MCO_D004	17090.52	MC1_DC50	16500.15
HTO_RX_CADP05	17428.15	MCO_D005	17098.8	MC1_DC51	16548.95
HTO_RX_CADP06	17410.73	MCO_D006	17125.19	MC1_DC52	16497.59
HTO_RX_CADP07	17430.24	MCO_D007	17124	MC1_DC53	16510.02
HTO_RX_CADP08	17438.23	MCO_D008	19653.77	MC1_DC54	16516.82
HTO_RX_CADP09	17434.67	MCO_D009	19585.6	MC1_DC55	16506.12
HTO_RX_CADP10	17437.62	MCO_D010	19597.58	MC1_DC56	14655.59
HTO_RX_CADP11	17430.69	MCO_D011	19636.5	MC1_DC57	14668.89
HTO_RX_CADP12	17424.17	MCO_D012	19624.42	MC1_DC58	14716.23
HTO_RX_CADP13	17419.91	MCO_D013	19632.68	MC1_DC59	14732.46
HTO_RX_CADP14	17441.08	MCO_D014	19587.24	MC1_DC60	14694.47
HTO_RX_CADP15	17444.15	MCO_D015	19598.84	MC1_DC61	14682.54
HTO_RX_CLKNO	17428.7	MCO_D016	20019.27	MC1_DC62	14648.52
HTO_RX_CLKN1	17436.18	MCO_D017	20044.59	MC1_DC63	14673.02
HTO_RX_CLKPO	17410	MCO_D018	20015.42	MC1_DCSN00	16998.5
HTO_RX_CLKP1	17428.83	MCO_D019	20055.44	MC1_DCSN01	16859.07
HTO_RX_CTLNO	17426.96	MCO_D020	20042.74	MC1_DCSN02	18730.36

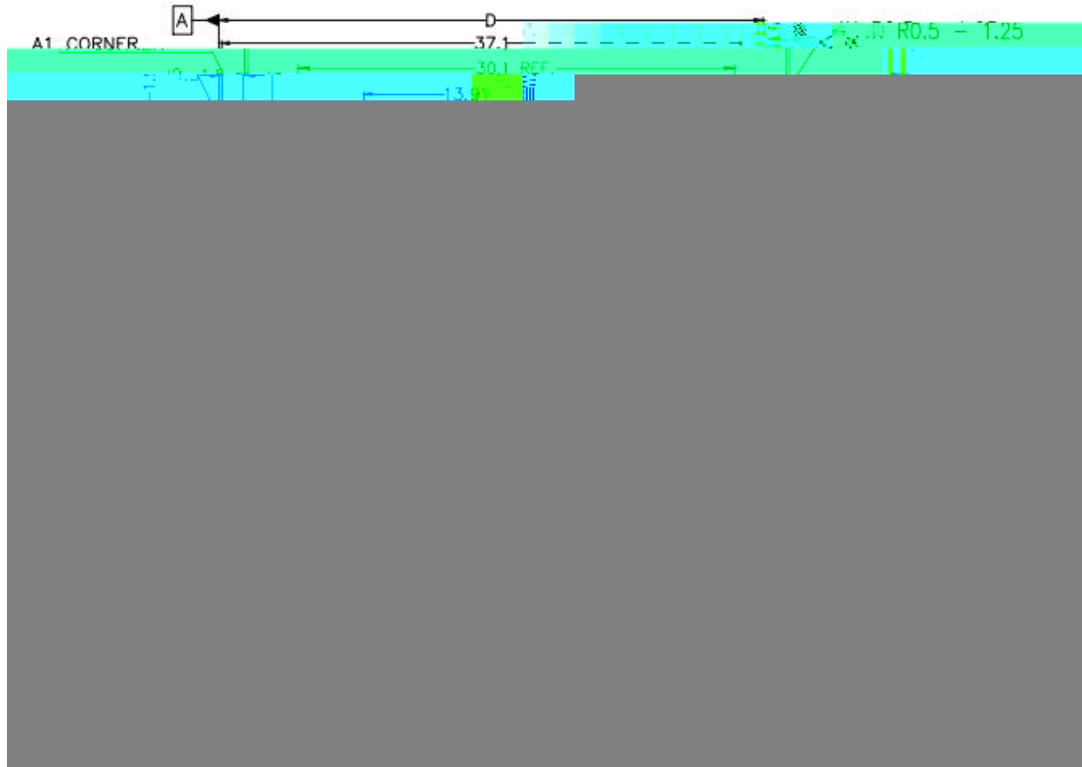


Net Name	Overall I Total (um)	Net Name	Overall I Total (um)	Net Name	Overall I Total (um)
HTO_RX_CTLN1	17429.34	MC0_D021	20050.16	MC1_DCSN03	19851.63
HTO_RX_CTLPO	17428.36	MC0_D022	20011.69	MC1_DCSN04	16431.61
HTO_RX_CTLP1	17434.33	MC0_D023	20008.15	MC1_DCSN05	17209.3
HTO_TX_CADN00	19577.77	MC0_D024	18223.83	MC1_DCSN06	16500.04
HTO_TX_CADN01	19586.78	MC0_D025	18249.12	MC1_DCSN07	14688.17
HTO_TX_CADN02	19584.09	MC0_D026	18233.37	MC1_DCSN08	19347.09
HTO_TX_CADN03	19576.72	MC0_D027	18295.34	MC1_DCSN09	16958.21
HTO_TX_CADN04	19574.79	MC0_D028	18244.48	MC1_DCSN10	16902.63
HTO_TX_CADN05	19596.13	MC0_D029	18281.98	MC1_DCSN11	18705.97
HTO_TX_CADN06	19604.94	MC0_D030	18270.42	MC1_DCSN12	19897.71
HTO_TX_CADN07	19591.82	MC0_D03			



12.

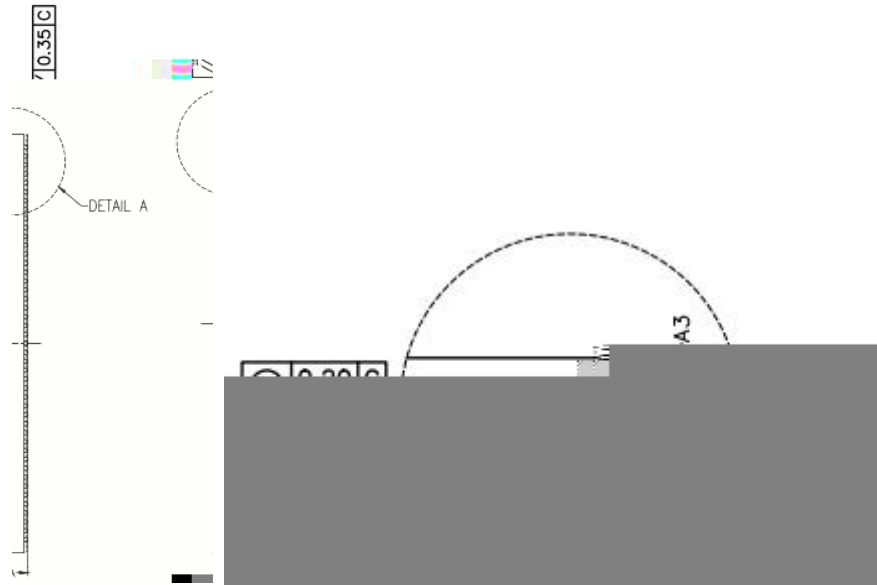
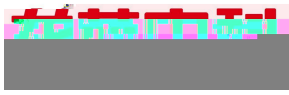
12.1. @G 5) \$\$\$#@G 6) \$\$\$



12.1 3A5000/3B5000



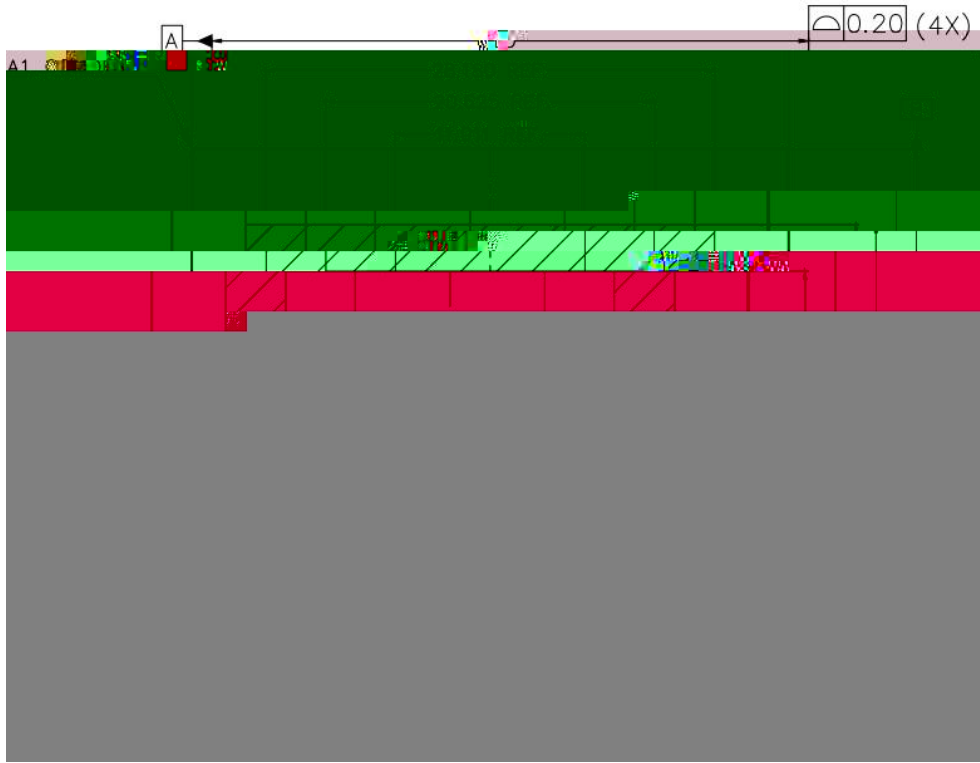
12.2 3A5000/3B5000



12.3 3A5000/3B5000

0.48mm

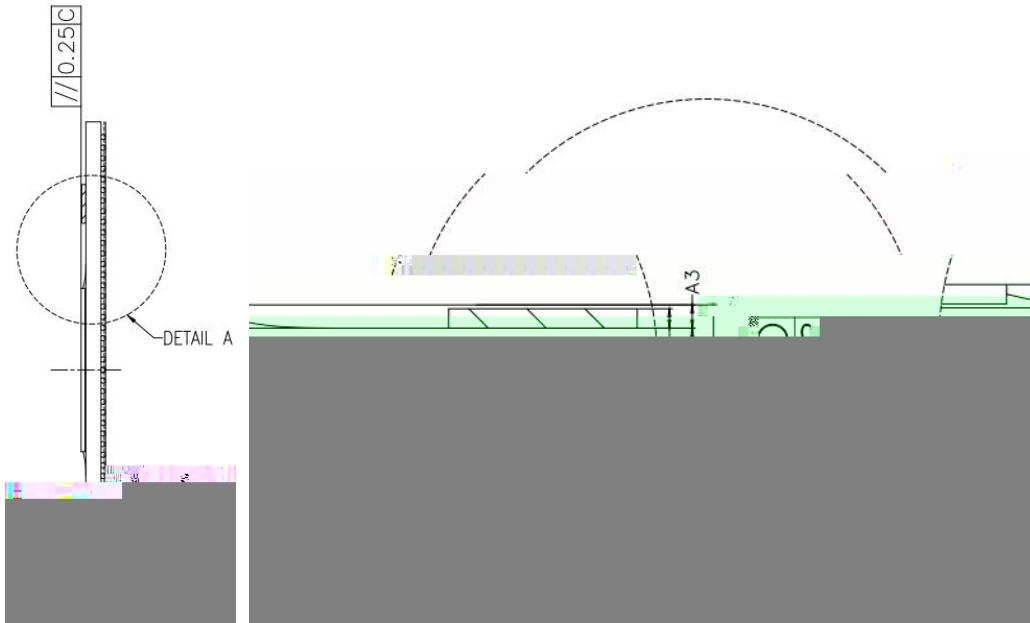
12. 2. @G 5) \$\$\$A



12. 4 3A5000M



12. 5 3A5000M

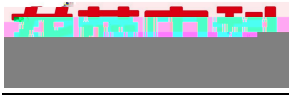


(UNITS OF MEASURE=MILLIMETER)

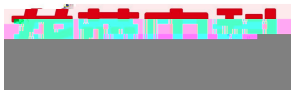
SYMBOL	MIN	NOM	MAX

12.6 3A5000M

0.48mm



13.



B

SE

S

SE

®

A



13. 3. 1



