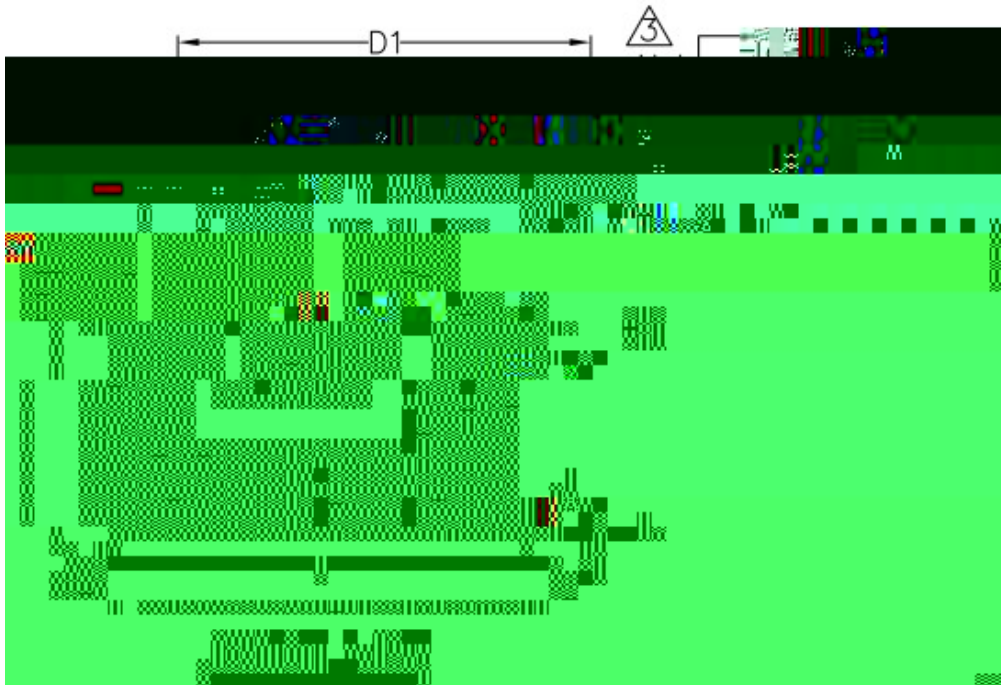
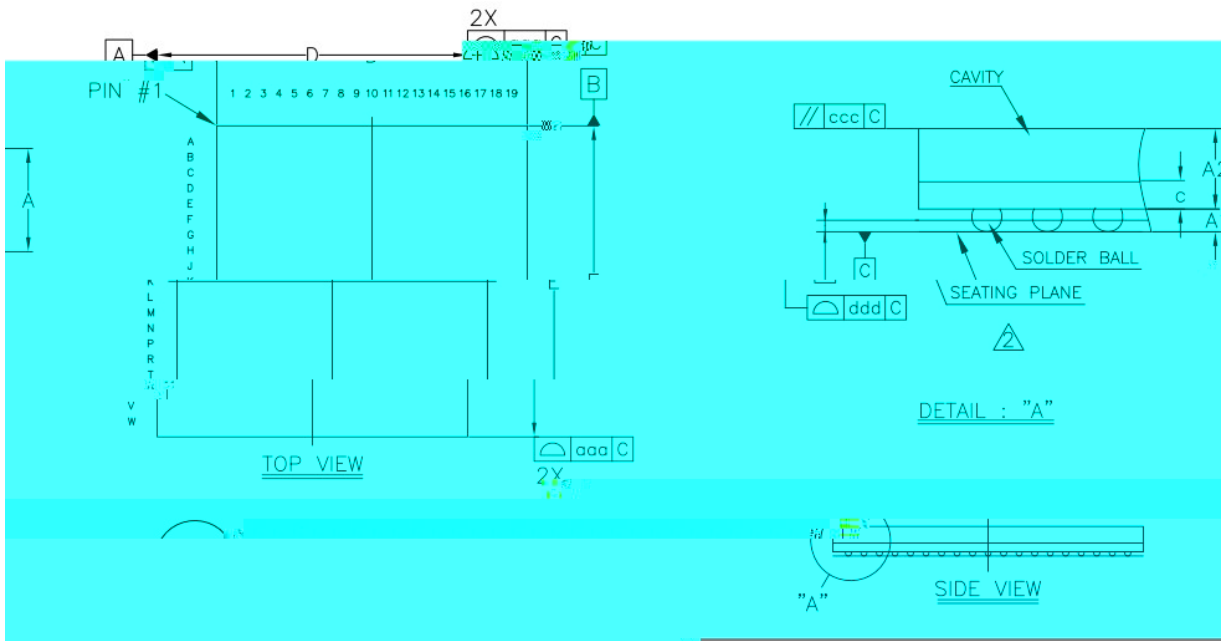




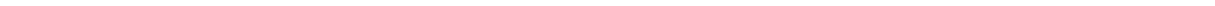
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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
A	GND_PEP HY_GD	PE_TX_N 3	GND_PEP HY_GD	PE_RX_N 3	PE_RX_N 2	GND_PEP HY_GD	PE_TX_N 2	PE_TX_N 1	GND_PEP HY_GD	PE_RX_N 1	PE_RX_N 0	GND_PEP HY_GD	PE_TX_N 0	UART_SRX IV_0	SPI_CLK_D IV_0	NO_GPIO 1	N2_GPIO 1	N3_GPIO 1	GND	
B	GND_PEP HY_GD	PE_TX_P 3	GND_PEP HY_GD	PE_RX_P 3	PE_RX_P 2	GND_PEP HY_GD	PE_TX_P 2	PE_TX_P 1	GND_PEP HY_GD	PE_RX_P 1	PE_RX_P 0	GND_PEP HY_GD	PE_TX_P 0	SPI_CLK_D IV_2	SPI_CLK_D IV_1	PE_RST_S EQ	SPI_CLK EQ	PRST_N	JTDI	
C	MNG_BSY	MIL_MD	VCC33_N3 EFUSE	VCC33_N1 EFUSE	VCC33_N0 EFUSE	GND_TS GND33A	VCC33A_T DC	PE_REF_C LK_P	GND_PEP HY_GD	PE_PHY_R ESREF	GND_PEP HY_GD	PRB_HIT	PRB_CLKO UT	MNG_GPIO O_1	SPI_SI	JTMS	NO_DIS_N	N2_DIS_N	JTAG_SEL 1	
D	PRR_EN	RCFE_BEV	MIL_MD	USE	VCC33_EF	GND_PEP	VCC33A_T	PE_REF_C	VCC33A_P	PE_PHY_R	GND_PEP	PRB_HIT	PRB_CLKO	MNG_GPIO	SPI_SI	JTMS	NO_DIS_N	N2_DIS_N	JTAG_SEL	
E	CLK_TST EL_1	CLK_TST EL_3	USE_EXT PHY	CLK_TST EL_0	CLK_TST EL_2	VCC11A_P E_VPTX3	VCC11A_P E_VPTX2	VCC33A_P E_VPH	VCC11A_P E_VPTX1	VCC11A_P E_VPTX0	VCC33A_P E_VPH	VCC11A_P E_VPTX1	VCC11A_P E_VPTX0	VCC33A_P E_VPH	VCC11A_P E_VPTX1	VCC11A_P E_VPTX0	VCC33A_P E_VPH	VCC11A_P E_VPTX1	VCC11A_P E_VPTX0	VCC33A_P E_VPH
F	TEST_MO DE_0	TEST_MO DE_2	MNG_DET	TEST_MO DE_1	TEST_SEL										JTCK	N3_DIS_N	N3_RGMII TX_1	N2_RGMII TX_2	N2_RGMII RX_3	
G	SEC_DISA BLE	SCAN_EN ABLE	PERST_N	FLASH_SE CTOR	POR_BYP ASS		VCC310	GND	GND	VCC310	VCC310	VCC310	GND			N3_RGMII TX_2	N3_RGMII TX_0	N3_RGMII TX_3	N2_RGMII TX_3	N2_RGMII RX_3
FLASH BY: 550* 31001																				

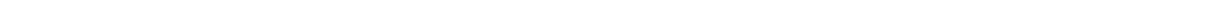
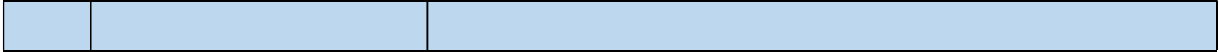
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31

	-65		140	° C
Tj(FN)	-55		125	° C
VCK VCI1A	-01	11	115	V
VCI1A_FE; VCI1A_AIO; VCI1A_CEN; VCI1A_HL	-01	11	115	V
VCI1Q; VCI3A; VCI33	-04	33	37	V
VCI1O; VCI25V	-04	33	37	V

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	-40		85	° C
VCK VCI1A	105	11	115	V
VCI1A_FE; VCI1A_AIO; VCI1A_CEN; VCI1A_HL	105	11	115	V
VCI1Q; VCI3A; VCI33	315	33	345	V
VCI1O; VCI25V	315	33	345	V

33

IOreference vdtage	Vref		30	33	36	V
Input low vdtage	Vl				08	V
Input high vdtage	Vh		20			V
Input low current	Iil	Vin=0V	-20		0	μA
Input high current	Iih	Vin=Vref- Vref, max	0		200	μA
Output low vdtage	Vl	Id=-4nA; Vref=rin	0		400	nW
Output high vdtage	Vh	ICh=- 4nA; Vref=rin	24		Vref	V

34

3.1.1 NCSI AC Specification

Tck	NSI_REF_CLK Frequency		50		NE
Rdc	NSI_REF_CLK duty cycle	35		65	%
Racc	NSI_REF_CLK accuracy			100	ppm
Tco	Clock to out (10 pF \times load \leq 50 pF) NSI_EQ1Q , NSI_SRIV Data valid from NSI_REF_CLK rising edge	2.5		12.5	ns
Tsu	NSI_EQ1Q , NSI_TXEN Data Setup to NSI_CLKIN rising edge	3			ns
Thdd	NSI_EQ1Q , NSI_TXEN Data hold from NSI_REF_CLK rising edge	1			ns
Tr	NSI_EQ1Q , NSI_SRIV Output Time rise	0.5		6	ns
Tf	NSI_EQ1Q , NSI_SRIV Output Time fall	0.5		6	ns
Tdr/Tdf	NSI_REF_CLK Rise/Fall Time	0.5		3.5	ns

34

Frequency	-	-	25	-	NE
Frequency Stability	Ta=0 70	-30		+30	ppm
Frequency Tolerance	Ta=25	-50		+50	ppm
Duty Cycle		40		60	%
Broadband Peak to peak Jitter				200	ps
Vpeak to peak		3.135	3.3	3.465	V



Rise time 10%90%				10	ns
Fall time 10%90%				10	ns
Operation temperature Range		0		70	

35

CHY IP 1 IV 33V 5ms 33V rise time 1ms
33V 1 IV

Rt1	33V rise time	1	-	100	ms
Rt2	33V ready to 1 IV ready time	-5	-	-	ms

vrbord	V5Q0V
microchip	SS125AF080B
	CD5Q0

1	VN8002		0 - 70 , 4m ²	2
2	VN8002S		0 - 70 , 4m ² , SM/SN/SI	2
3	VN8004		0 - 70 , 4m ⁴	4
4	VN8004S		0 - 70 , 4m ⁴ , SM/SN/SI	4
5	VN8002L		-40 - 85 , 4m ²	2
6	VN8002LS		-40 - 85 , 4m ² , SM/SN/SI	2
7	VN8004L		-40 - 85 , 4m ⁴	4
8	VN8004LS		-40 - 85 , 4m ⁴ , SM/SN/SI	4

2
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