





## Table of Contents









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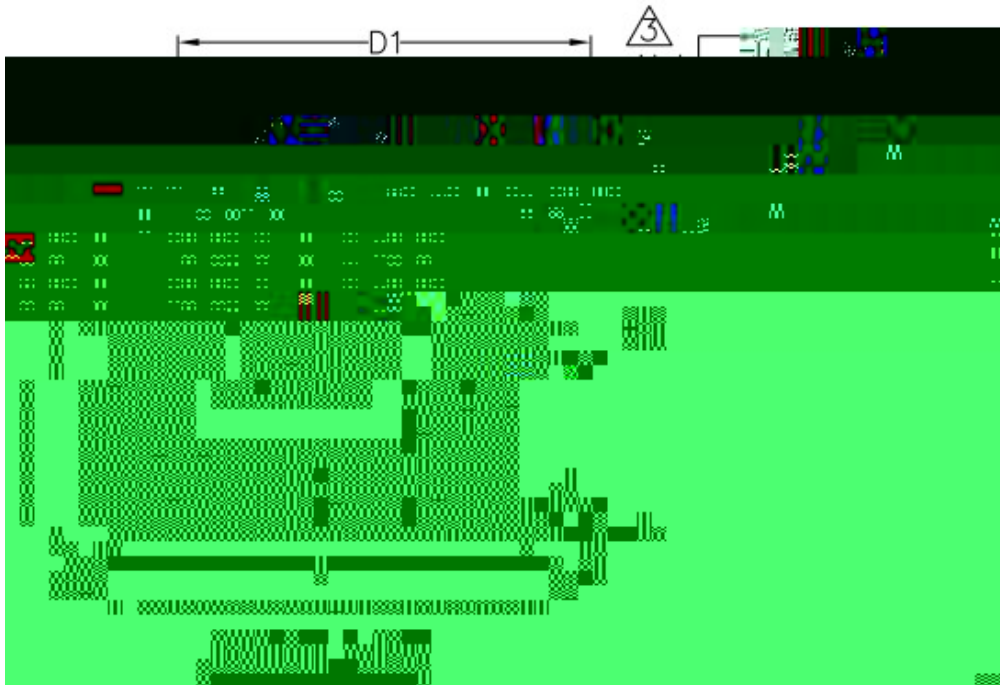
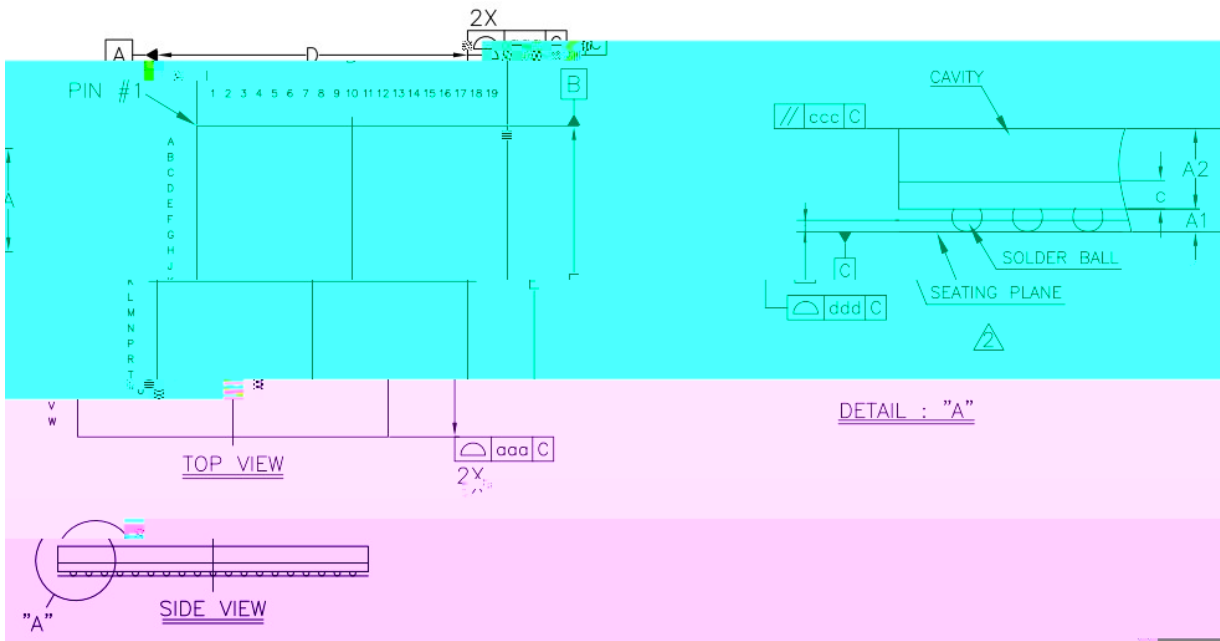
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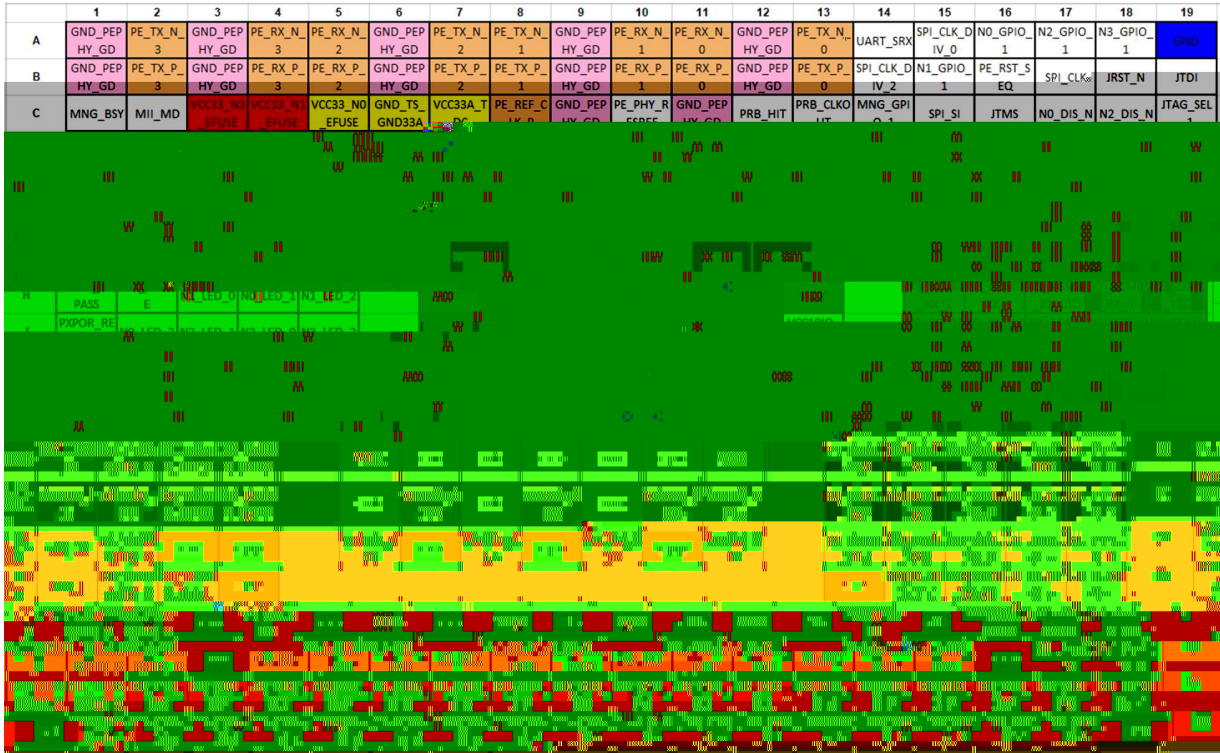












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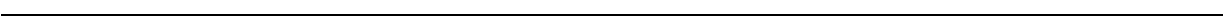



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### 31

	-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 VCI3	-04	33	37	V
VCI1O; VCI25V	-04	33	37	V

### 32

	-40		85	° C
VCK VCI1A	105	11	115	V
VCI1A_FE; VCI1A_AIO VCI1A_CEN; VCI1A_HL	105	11	115	V
VCI1Q; VCI3A VCI3	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

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

## 34

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



<b>Rise time 10%90%</b>				<b>10</b>	<b>ns</b>
<b>Fall time 10%90%</b>				<b>10</b>	<b>ns</b>
<b>Operation temperature Range</b>		<b>0</b>		<b>70</b>	

### 35

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

<b>R1</b>	<b>33V rise time</b>	<b>1</b>	-	
<b>R3</b>	<b>IV 33V ready to 1 IV ready time</b>	<b>-5</b>	-	

<b>virbond</b>	<b>V5Q0V</b>
<b>microchip</b>	<b>SS125AF080B</b>
	<b>CD5Q0</b>



<b>1</b>	<b>VN8602</b>		<b>0 - 70 , 4m<sup>2</sup></b>	<b>2</b>
<b>2</b>	<b>VN8602S</b>		<b>0 - 70 , 4m<sup>2</sup> , SM/SN/SM</b>	<b>2</b>
<b>3</b>	<b>VN8604</b>		<b>0 - 70 , 4m<sup>4</sup></b>	<b>4</b>
<b>4</b>	<b>VN8604S</b>		<b>0 - 70 , 4m<sup>4</sup> , SM/SN/SM</b>	<b>4</b>
<b>5</b>	<b>VN86012</b>		<b>-40 - 85 , 4m<sup>2</sup></b>	<b>2</b>
<b>6</b>	<b>VN86012S</b>		<b>-40 - 85 , 4m<sup>2</sup> , SM/SN/SM</b>	<b>2</b>
<b>7</b>	<b>VN86014</b>		<b>-40 - 85 , 4m<sup>4</sup></b>	<b>4</b>
<b>8</b>	<b>VN86014S</b>		<b>-40 - 85 , 4m<sup>4</sup> , SM/SN/SM</b>	<b>4</b>

**2**  
**N N N**

**N N N N**

**N**