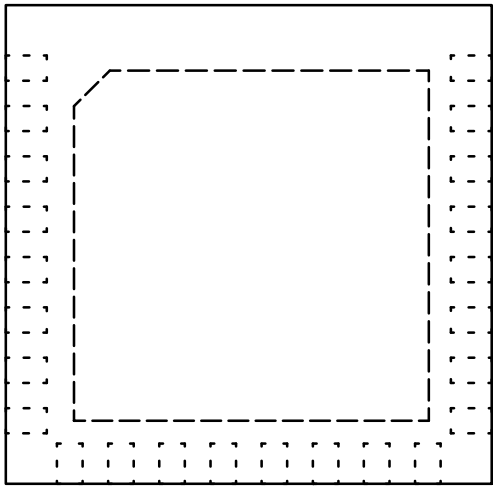
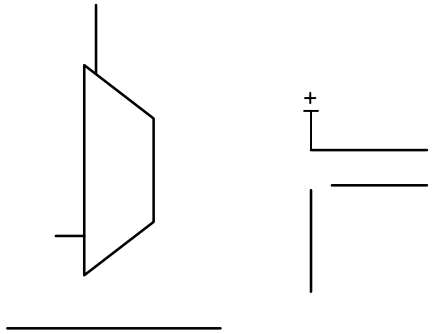
Semiconductor Components Industries, LLC, 2015





MC100EP809

Table 8. AC CHARACTERISTICS V_{CCI} = 3.0 V to 3.6 V; V_{CCO} = 1.6 V to 2.0 V, GND = 0 V (Note 5)

Symbol	Characteristic	0 C			25 C			85 C			Unit
		Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	
V_{Opp}	Differential Output Voltage (Figure 3) f_{out} < 100 MHz f_{out} < 500 MHz f_{out} < 750 MHz	 600 600 450	 850 750 575		 600 600 450	 850 750 575		 600 600 450	 850 750 575		 mV mV mV
t_{PLH} t_{PHL}	Propagation Delay (Differential Configuration) LVPECL_CLK to Q HSTL_CLK to Q	 680 690	 800 830	 930 990	 700 700	 820 850	 950 1000	 780 790	 920 950	 1070 1110	 ps ps

t

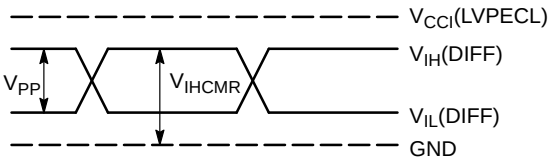


Figure 4. LVPECL Differential Input Levels

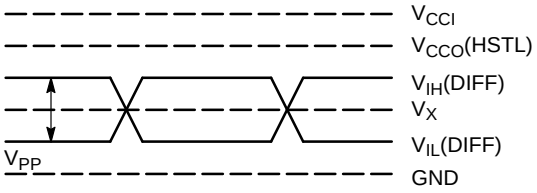


Figure 5. HSTL Differential Input Levels

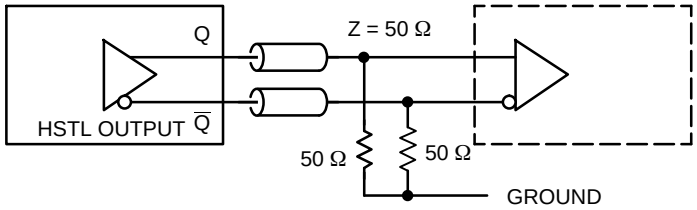
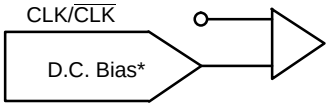
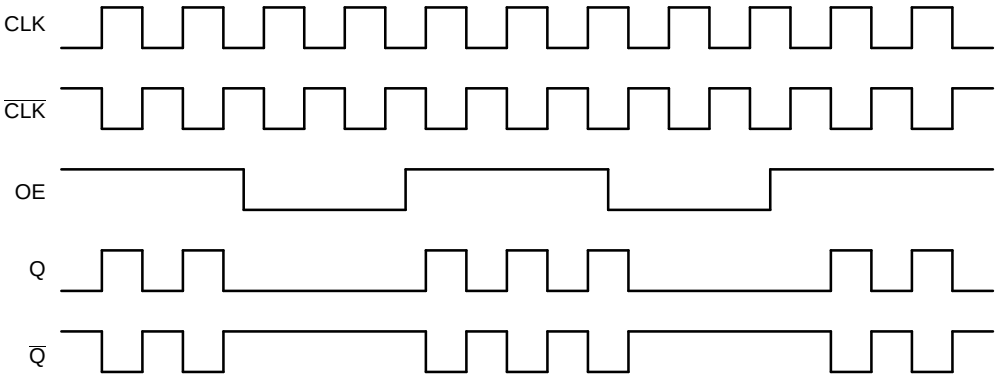


Figure 6. HSTL Output Termination and AC Test Reference



*Must be CLK/$\overline{\text{CLK}}$ common mode voltage: $((V_{IH} + V_{IL})/2)$.

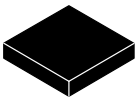
Figure 7. Single−Ended CLK/$\overline{\text{CLK}}$ Input Configuration



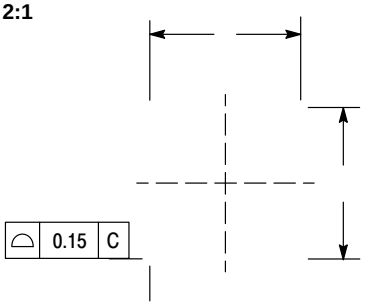
MECHANICAL CASE OUTLINE
PACKAGE DIMENSIONS

QFN32 5x5, 0.5P
CASE 488AM
ISSUE A

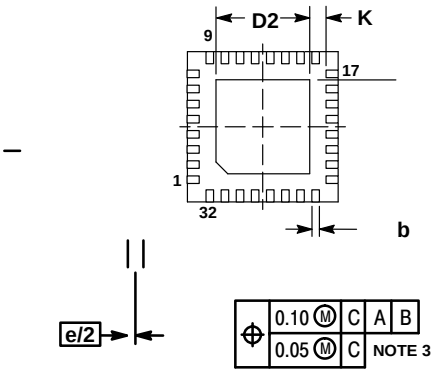
DATE 23 OCT 2013



SCALE 2:1

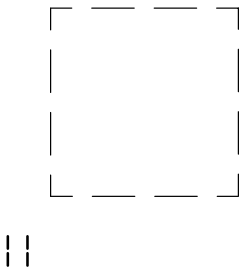


	MIN	MAX
A	0.80	1.00
A1	---	0.05
A3	0.20 REF	
b	0.18	0.30
D	5.00 BSC	
D2	2.95	3.25
E	5.00 BSC	
E2	2.95	3.25
e	0.50 BSC	
K	0.20	---
L	0.30	0.50
L1	---	0.15



XXXXXXXX
XXXXXXXX
AWLYYWW▪
▪Free indicator, “G” or

RECOMMENDED



PITCH

DIMENSION: MILLIMETERS

DOCUMENT NUMBER:	98AON20032D	

onsemi, , and other names, marks, and brands are registered and/or common law trademarks of Semiconductor Components Industries, LLC dba “**onsemi**” or its affiliates and/or subsidiaries in the United States and/or other countries. **onsemi** owns the rights to a number of patents, trademarks, copyrights, trade secrets, and other intellectual property. A listing of **onsemi**’s product/patent coverage may be accessed at www.onsemi.com/site/pdf/Patent−Marking.pdf. **onsemi** reserves the right to make changes at any time to any products or information herein, without notice. The information herein is provided “as−is” and **onsemi** makes no warranty, representation or guarantee regarding the accuracy of the information, product features, availability, functionality, or suitability of its products for any particular purpose, nor does **onsemi** assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. Buyer is responsible for its products and applications using **onsemi**