CHANGE NOTIFICATION

LINEAR TECHNOLOGY
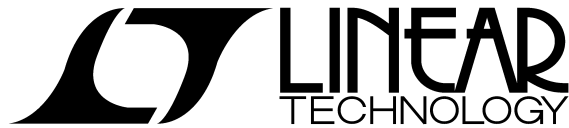
Linear Technology Corporation
1630 McCarthy Blvd., Milpitas, CA 95035-7417
(408) 432-1900

January 21, 2013

PCN#: 012113

Dear Sir/Madam:

Subject: Notification of Change to LTC1992CMS8, LTC1992IMS8 and LTC1992HMS8 Datasheet

Please be advised that Linear Technology Corporation has made a minor change to the LTC1992CMS8, LTC1992IMS8 and LTC1992HMS8 product datasheet to better center the parametric distribution within the specification range. The changes are shown on the attached page of the marked up datasheet. There was no change made to the die. The product shipped after February 21st, 2013 will be tested to the new limits.

Should you have any further questions, please feel free to contact me at (408)-432-1900 ext. 2519, or by e-mail at NGIRN@Linear.com. If I do not hear from you by February 21st, 2013, we will consider this change to be approved by your company.

Sincerely,

Naib Girn
Quality Assurance Manager

ELECTRICAL CHARACTERISTICS
The ● denotes the specifications which apply over the full operating temperature range, otherwise specifications are at $T_A = 25°C$. $+V_S = 5V$, $-V_S = 0V$, $V_{INCM} = V_{OUTCM} = V_{OCM} = 2.5V$, unless otherwise noted. V_{OCM} is the voltage on the V_{OCM} pin. V_{OUTCM} is defined as $(+V_{OUT} + -V_{OUT})/2$. V_{INCM} is defined as $(+V_{IN} + -V_{IN})/2$. V_{INDIFF} is defined as $(+V_{IN} - -V_{IN})$. $V_{OUTDIFF}$ is defined as $(+V_{OUT} - -V_{OUT})$. Specifications applicable to all parts in the LTC1992 family.

SYMBOL	PARAMETER	CONDITIONS		ALL C AND I GRADE			ALL H GRADE			UNITS
				MIN	TYP	MAX	MIN	TYP	MAX	
I_{SC}	Output Short-Circuit Current Sourcing (Notes 2,3)	$V_S = 2.7V$, $V_{OUT} = 1.35V$	●	20	30		20	30		mA
		$V_S = 5V$, $V_{OUT} = 2.5V$	●	20	30		20	30		mA
		$V_S = \pm5V$, $V_{OUT} = 0V$	●	20	30		20	30		mA
	Output Short-Circuit Current Sinking (Notes 2,3)	$V_S = 2.7V$, $V_{OUT} = 1.35V$	●	13	30		13	30		mA
		$V_S = 5V$, $V_{OUT} = 2.5V$	●	13	30		13	30		mA
		$V_S = \pm5V$, $V_{OUT} = 0V$	●	13	30		13	30		mA
A_{VOL}	Large-Signal Voltage Gain		●		80			80		dB

The ● denotes the specifications which apply over the full operating temperature range, otherwise specifications are at $T_A = 25°C$. $+V_S = 5V$, $-V_S = 0V$, $V_{INCM} = V_{OUTCM} = V_{OCM} = 2.5V$, unless otherwise noted. V_{OCM} is the voltage on the V_{OCM} pin. V_{OUTCM} is defined as $(+V_{OUT} + -V_{OUT})/2$. V_{INCM} is defined as $(+V_{IN} + -V_{IN})/2$. V_{INDIFF} is defined as $(+V_{IN} - -V_{IN})$. $V_{OUTDIFF}$ is defined as $(+V_{OUT} - -V_{OUT})$. Specifications applicable to the LTC1992 only.

SYMBOL	PARAMETER	CONDITIONS		LTC1992CMS8 LTC1992ISM8			LTC1992HMS8			UNITS
				MIN	TYP	MAX	MIN	TYP	MAX	
I_B	Input Bias Current	$V_S = 2.7V$ to $\pm5V$	●		2	250		2	400	pA
I_{OS}	Input Offset Current	$V_S = 2.7V$ to $\pm5V$	●		0.1	100		0.1	150	pA
R_{IN}	Input Resistance		●		500			500		$M\Omega$
C_{IN}	Input Capacitance		●		3			3		pF
e_n	Input Referred Noise Voltage Density	$f = 1kHz$			35			35		$nV/\sqrt{Hz}$
i_n	Input Noise Current Density	$f = 1kHz$			1			1		$fA/\sqrt{Hz}$
V_{INCMR}	Input Signal Common Mode Range		●	$(-V_S) - 0.1V$		$(+V_S) - 1.3V$	$(-V_S) - 0.1V$		$(+V_S) - 1.3V$	V
CMRR	Common Mode Rejection Ratio (Input Referred)	$V_{INCM} = -0.1V$ to $3.7V$	●	69	90		69	90		dB
SR	Slew Rate (Note 4)		●	0.5	1.5		0.5	1.5		V/µs
GBW	Gain-Bandwidth Product ($f_{TEST} = 100kHz$)	$T_A = 25°C$		3.0	3.2	~~3.5~~ 4.0	3.0	3.2	~~3.5~~ 4.0	MHz
		LTC1992CMS8	●	2.5	3.0	~~4.0~~ 4.6				MHz
		LTC1992IMS8/ LTC1992HMS8	●	1.9		~~4.0~~ 4.6	1.9		~~4.0~~ 4.6	MHz

1992fb