

ECN 1344-16 11/01/2013

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Sheet: 2 OF 3		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	

4 4	ND 4 0 0 16 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.30   0.30   0.43   0.013   0.015   0.017   L   0.35   0.20     K   0.20	1.60   1.70   1.80   0.063   0.067   0.071   0.2   2.50     3.00 BSC	3.00 BSC 0.118 BSC D v.10	0.00 REF 0.30 0.008 REF A3 0.00	0.80 0.90 1.00 0.032 0.036 0.039 A	SYMBOLS DIMENSIONS IN MM DIMENSIONS IN INCH ONE OF THE OF T			NE 4 4 NE NE	16 16	6 0° - 14° 0° - 14° 0° 0°	0.25 0.30 0.35 0.010 0.012 0.014 L	E2 1.60 1.70 1.80 0.063 0.067 0.071 E2 2.20 e 0.50 BSC 0.020 BSC e 0	3.00 BSC 0.118 BSC E	3.00 BSC 0.118 BSC U 4	0.30 0.008 0.010 0.012 b 0.25	0.00 0.02 0.05 0.000 0.001 0.002 A1 0.000 0.00 0.00 0.00 0.000 0.000 A1 0.000	MIN NOM MAX MIN NOM MAX	ENSIONS IN MM DIMENSIONS IN INCH Control Unit) (Reference Unit) SYMBOLS	16LD 3x3 QFN (OPTION 2) JEDEC MO-220 Variation VEED 16LD 4x4	-	NE 4 4 NE NE	16 16	θ 0° - 14° 0° - 14° θ 0°	0.35 0.40 0.45 0.014 0.016 0.018 L	1.80 0.060	D2         1.50         1.65         1.80         0.060         0.065         0.071         D2         1.60           E         3.00 BSC         0.118 BSC         E         3	3.00 BSC 0.118 BSC D	0.18 0.25 0.30 0.007 0.010 0.012 b	A1 0.00 0.90 1.00 0.032 0.036 0.039 A — A1 0.00 0.07 0.05 0.000 0.001 0.007 A1 0.00	Control Unit) (Reference Unit) SYMBOLS NOM MAX MIN NOM MAX	DIMENSIONS IN INCH	_ 
O (	ľ	0.45 0.014 0.016 0.018 L 0.35 0.40 0	2.50 2.65 4.00 BSC 2.50 2.65	0.157 BSC D 4.00 BSC	F 0.008 REF A3 0.20 REF 0.20 REF 0.20 REF	1.00 0.032 0.035 0.039 A 0.80 0.90	MIN NOM MAX MIN NOM MAX  MIN NOM MAX MIN NOM MAX  MIN NOM MAX MIN NOM MAX  MIN NOM MAX  MIN NOM MAX  MIN NOM MAX  MIN NOM MAX  MIN NOM MAX  MIN NOM MAX	-220 Variation VGGD-5 24LD 4x4		4 4 NE 6	16 ×	0.00	55 0.65 0.018 0.022 0.026 L 0.30 0.40	2.20   2.45   0.50 BSC	3C 0.157 BSC E 4.00 BSC	3.50 0.087 0.004 0.103 D2 3.20 3.45	0.35 0.010 0.012 0.014 b 0.18 0.25	0.02 0.05 0.000 0.001 0.002 A1 0.00 0.02 0.001 0.008 BFE A2 0.00 B	MAX MIN NOM MAX MIN NOM	N MM DIMENSIONS IN INCH (Reference Unit) SYMBOLS (Control Unit)	16LD 4x4 QFN JEDEC MO-220 Variation VGCC-4 24LD 4x4 QFN (OPTION 2) JEDEC		4 4 4 NE 6	16 ×	- 14: 0· - 14: 0 0· - ·	0.50 0.012 0.016 0.020 L 0.35 0.40	1.80   0.063   0.067   0.071   E2   2.50   2.65	2.50   2.65   4.00 BSC	0.118 BSC D 4.00 BSC	F 0.008 REF A3 0.20 REF 0.30 0.007 0.010 0.012 b 0.18 0.25	- 1.00 0.039 A 0.80 0.90 1.	(Reference Unit) SYMBOLS (Control Un	DIMENSIONS IN INCH	
By: AD Date: 10/29	14.	45 0.014 0.016 C	2.80 0.098 0.104 0.110 0.157 BSC 2.80 0.098 0.104 0.110	0.157 BS	0.000 0.001 0.002 N 0.008 REF ND	0.031 0.35 0.039 0 0	MAX	M0-220 Variation VGGD-6 E2 3.15	D2 3.15	6 D 5.00 BSC	A3	14. 0. — 14. A1 0.00 0.90	0.016 0.020 STMBULS MIN	2.60   0.087   0.096   0.102	0.157 BSC 28LD 5x5	0.157 BSC	0.012	0,	I MIN NOM	DIMENSIONS IN INCH (Reference Unit)  e  0.75	MO-220 Variation VGGD-8 E 5.		0.18	A1 0.00	0° - 14° A 0.80	0.016 0.018 SYMBOLS (Co	2.80 0.098 0.104 0.110 28LD 5x5 QFN (OPTION 0.020 BSC	2.80 0.098 0.104 0.110 0.157 BSC	0.157 BSC	0.007 0.008	1.00 0.032 0.036 0.039 0.05 0.000 0.001 0.002	(Reference Unit) B	DIMENSIONS IN INCH A	MO-220 Variation VGCD-6
10/29/13 Revision: B Sheet: 2 OF	QFN PAC	EXAR CORPORATION		7	7		0.65 0.018 0.022 0.026 	3.35 0.124	3.35 0.124	ISC 0.007 0.010 0.012	0.008	1.00 0.032 0.035 0.039 0.05 0.000 0.001 0.002	MIN NOM	DIMENSIONS IN INCH	QFN (OPTION 2) JEDEC MO-220 Variation VHHD-3	7	7			3.80 0.138 0.144 0.020 BSC	0.197 BSC	3 80 0 138	0.30		1.00	(Reference Un	-1° -1°					DRAWNKS INTO POD-00000003.	10/17/13	DISCRIPTION DATE APP'D

## ECN 1344-16 11/01/2013

	EXAR CO	EXAR CORPORATION
In Mixed-Signal	QFN PAC	QFN PACKAGE OUTLINE
, Approval:	Drawing No:	POD-00000003
<sup>te:</sup> 10/29/13 Revision:	Revision: B	Sheet: 3 OF 3

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10/29/13	Packaging Approval:	R Mixed-Signal
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5.50 | 5.65 | 5.80 0.50 BSC

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			0.	0.008	0.014		0.217	0	0.217	0	0.007		0.000	0.032	Z	
12	12	48	ı	I	0.016	0.020 BSC	0.222	0.276 BSC	0.222	0.276 BSC	0.010	0.008	0.001	0.035	NOM	
			14.	1	0.018	С	0.228		0.228	()	0.012	骨	0.002	0.039	MAX	
																_
									NE	i	5	2	θ	_	L	
													o.	0.20	0.35	
									16	5	;	2	Ι	I	0.40	0.00
													14.	I	0.45	

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2 2 1		0.007		0.000	0.032	N.N.	(Ne	DIMEN	ZZU VGRIGUORI VKKU-4	Var. it.					o.	0.008	0.012	0	0.167	0	0.167	)	
200	0.276 BSC	0.010	0.008	0.001	0.035	NOM	vereience out)	DIMENSIONS IN INCH	VNNU-4	NAMA .		10	10	40	1	-	0.016	0.020 BSC	0.173	0.236 BSC	0.173	0.236 BSC	41.4
200		0.012	REF	0.002	0.039	MAX	Jillo)	NCH							14.	1	0.020	0	0.179		0.179		0.0
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ΝE	R	5 z	2 0	θ	_	٦	æ	E2	Е	D2	0	Ь	А3	A1	٨		SYMBOLS					ME	
				O.	0.20	0.35		7.50		7.50		0.18		0.00	0.80	MIN	()	DIMEN	4LD 9x9		Ī		_
5	16	64	2	ı	_	0.40	0.50 BSC	7.65	9.00 BSC	7.65	9.00 BSC	0.25	0.20 REF	0.02	0.90	MON	(Control Unit)	DIMENSIONS IN MM	Q+N JED	1		14	1
				14*	1	0.45	0	7.80	0	7.80		0.30		0.05	1.00	MAX	nit)	Z M	EC MO-2				
				o.	800.0	0.014		0.295		0.295		0.007		0.000	0.032	MN	(Re	DIMEN	64LD 9x9 QFN JEDEC M0-220 Variation VMMD	3			
16	16	54		ı	Ι	0.016	0.020 BSC	0.301	0.354 BSC	0.301	0.354 BSC	0.010	0.008	0.001	0.035	MON	(Reference Unit)	DIMENSIONS IN INCH	on VMMD			14	4
				14°	I	0.018	ľ	0.307	C	0.307		0.012	ሞ	0.002	0.039	MAX	Jnit)	NCH					
	_	_	_	_			_	_	_	_	_	_	_	_	_	_	_			_	ι		_

SYMBOLS

DIMENSIONS IN MM (Control Unit)

<u>K</u>

NOM MAX

48LD 7x7 QFN JEDEC M0-220 Variation VKKD-4

NE	N	z	θ	Τ.	_	Ф	E2	ш	D2	D	Б	A3	A1	Α		SYMBOLS	(n
			0.	0.20	0.30		6.00	-	6.00	_	0.18	)	0.00	08.0	MZ.	DIMEN (C	56LD 8x8
14	14	56	1	1	0.40	0.50 BSC	6.15	8.00 BSC	6.15	8.00 BSC	0.25	0.20 REF	0.02	0.90	MON	DIMENSIONS IN N (Control Unit)	QFN JE
			14.	1	0.50		6.25	С	6.25	0	0.30		0.05	1.00	MAX	IN MM Unit)	DEC MO-
			0.	0.008	0.012		0.236	)	0.236		0.007	0	0.000	0.032	M N	DIMEN (Ret	JEDEC MO-220 Variation VLLD
14	14	56	ı	1	0.016	0.020 BSC	0.242	0.315 BSC	0.242	0.315 BSC	0.010	0.008 REF	0.001	0.035	MON	DIMENSIONS IN INCH (Reference Unit)	tion VLLD
			14.	1	0.020	C	0.246	10	0.246	0	0.012		0.002	0.039	MAX	INCH	

NE	ND	z	0	_	L	Ф	E2	m	D2	D	ь	A3	A1	Α		SYMBOLS	32LD 5x5
			o,	0.20	0.35		3.50		3.50		0.18	0	0.00	0.80	MZ	DIMEN (C)	QFN (OF
œ	œ	32	ı	1	0.40	0.50 BSC	3.65	5.00 BSC	3.65	5.00 BSC	0.25	0.20 REF	0.02	0.90	MON	DIMENSIONS IN MM (Control Unit)	TION 3)
			14.	1	0.45		3.80		3.80		0.30		0.05	1.00	MAX	nit) MM	JEDEC M
			0.	0.008	0.014		0.138		0.138		0.007		0.000	0.032	Z Z	DIMEN: (Ref	32LD 5x5 QFN (OPTION 3) JEDEC MO-220 Variation VHHD-4
œ	œ	32	ı	1	0.016	0.020 BSC	0.144	0.197 BSC	0.144	0.197 BSC	0.010	0.008	0.001	0.035	MON	DIMENSIONS IN INCH (Reference Unit)	riation VHI
			14"	ı	0.018	0	0.150		0.150		0.012	REF	0.002	0.039	MAX	Unit)	1D−4

NE NE	N	z	0	~	_	æ	E2	m	D2	0	ь	A3	A1	Α		SYMBOLS	32LD
			o.	0.20	0.35		3.75		3.75	_	0.18		0.00	0.80	<u>s</u>	DIMEN (C	5x5 QFN
∞	œ	32	1	1	0.40	0.50 BSC	3.80	5.00 BSC	3.80	5.00 BSC	0.25	0.20 REF	0.02	0.90	MON	DIMENSIONS IN MM (Control Unit)	(OPTION
			14.	1	0.45	()	3.85		3.85	0	0.30	''	0.05	1.00	MAX	nit) MM	2) JEDE
			o.	0.008	0.014		0.148		0.148		0.007		0.000	0.032	<u>s</u>	DIMEN (Re	C MO-22
00	œ	32	ı	1	0.016	0.020 BSC	0.150 0.152	0.197 BSC	0.150	0.197 BSC	0.010	0.008 REF	0.001	0.036	MON	DIMENSIONS IN INCH (Reference Unit)	32LD 5x5 QFN (OPTION 2) JEDEC MO-220 Variation VHHD
			14.	1	0.018	č	0.152	Ö	0.150 0.152	Ö	0.010 0.012	쮸	0.001 0.002	0.039	MAX	Unit)	n VHHD
_	_	_	-		_	_	_	_			_	_	_	_	_		
_			_			_				_	_		_				
M	ND	z	θ	Σ.	L	Ф	E2	т	D2	D	Ь	A3	A1	≻		SYMBOLS	40LD 6:
NE	ND	z	θ 0°	К 0.20	L 0.30		E2 4.30	т	D2 4.30	D	b 0.20		A1 0.00	A 0.80	SIN N		40LD 6x6 QFN (
NE 10	ND 10	N 40			L 0.30 0.40			E 6.00 BS(		D 6.00 BS(	0.20 0.25		0.00 0.02		MON NOM		40LD 6x6 QFN (OPTION 2)
			0.	0.20		e 0.50 BSC	4.30	E 6.00 BSC	4.30	D 6.00 BSC	0.20	A3 0.20 REF	0.00	0.80	<u>K</u>	SYMBOLS DIMENSIONS IN MM (Control Unit)	40LD 6x6 QFN (OPTION 2) JEDEC
			0. –	0.20 —	0.40	0.50 BSC	4.30 4.40 4.50		4.30 4.40		0.20 0.25		0.00 0.02	0.80 0.90	MON NOM	DIMENSIONS IN MM (Control Unit)	40LD 6x6 QFN (OPTION 2) JEDEC MO-220 V
			0° – 14°	0.20   -   -	0.40 0.50		4.30 4.40	E 6.00 BSC 0.236 BSC	4.30 4.40 4.50	D 6.00 BSC 0.236 BSC	0.20 0.25 0.30		0.00 0.02 0.05	0.80 0.90 1.00	MIN NOM MAX		40LD 6x6 QFN (OPTION 2) JEDEC M0-220 Variation VJJD-5

			4.	'	5		0		ő		õ		5	ŏ	×	_ <	EC
			0°	0.008	0.014	_	0.118		0.118		0.007		0.000	0.032	MN	DIMEN (Re	MO−220 V
8	œ	32	1	-	0.016	0.020 BSC	0.122	0.197 BSC	0.122	0.197 BSC	0.010	0.008	0.001	0.036	NOM	DIMENSIONS IN INCH (Reference Unit)	EC M0-220 Variation VHHD
			14.	I	0.018	C	0.126	0	0.126	C	0.012	REF	0.002	0.039	MAX	Jnit)	害
NE	ND	z	θ	_	_	е	E2	ш	D2	D	ь	A3	A1	Α		SYMBOLS	40LD 6x
			o.	0.20	0.35		4.50	_	4.50		0.18		0.00	0.80	MIN	DIMEN (C	5 QFN (0
10	10	40		1	0.40	0.50 BSC	4.65	6.00 BSC	4.65	6.00 BSC	0.25	0.20 REF	0.02	0.90	MON	DIMENSIONS IN MM (Control Unit)	PTION 1)
			14.	1	0.45	()	4.80	0	4.80	0	0.30		0.05	1.00	MAX	nit) MM	JEDEC N
			o,	0.008	0.014		0.177		0.177		0.007		0.000	0.032	MIN	DIMEN (Re	10-220 V
10	10	40	1	1	0.016	0.020 BSC	0.183	0.236 BSC	0.183	0.236 BSC	0.010	0.008	0.001	0.035	NOM	(Reference Unit)	40LD $6x6$ QFN (OPTION 1) JEDEC MO-220 Variation VJJD-5
			14.	1	0.018	ň	0.189	Ö	0.189	Ö	0.012	REF	0.002	0.039	MAX	Jnit)	UD-5

NF.	ND	z	θ	~	٦	е	E2	т	D2	D	ь	А3	A1	⊳		YMBOLS	32LD 5x
œ	8	32	0.	0.20	0.35	0.50 BSC	3.00	5.00 BSC	3.00	5.00 BSC	0.18	0.00   0.02   0.05 0.20 REF	0.80	NZ.	DIMENSIONS IN MM (Control Unit)	32LD 5x5 QFN (OPTION 1) JEDEC MO-220 Variation VHHD	
			-	_	0.40		3.10		3.10		0.25		0.90	NOM			
			14.	I	0.45		3.20		3.20		0.30		1.00	MAX			
œ	8	32	0°	0.008	0.014	0.020 BSC	0.118	0.197 BSC	0.118	0.197 BSC	0.007	0.000   0.001   0.002 0.008 REF	0.000	0.032	MIN	DIMENSIONS IN INCH (Reference Unit)	WO-220 Variation VHHD
			1	ı	0.016		0.122		0.122		0.010		0.001	0.036	MOM		
			14.	ı	0.018		0.126		0.126		0.012		0.002	0.039	MAX		
Z.	ND	z	θ	~	_	Ф	E2	т	D2	D	ь	A3	A1	Α		SYMBOLS	40LD 6x6 QFN (OPTION
_	1	4(	o.	0.20	0.35	0.50	4.50	6.00	4.50	6.00	0.18	9-	0.00	0.80	<u>N</u>	DIMENSION (Contro	QFN (0
					0		4.		4.		0		0	0.	z		PTIQ

SYMBOLS

В	Þ	REV.	
UPDATE FORMAT TO COMBINE ALL QFN PACKAGE OUTLINE DRAWINGS INTO POD-00000003.	DRAWING ORIGINATION - ECN# 1342-03	DISCRIPTION	REVISION HISTORY
10/29/13	10/17/13	DATE	
AD	AD	APP'D	