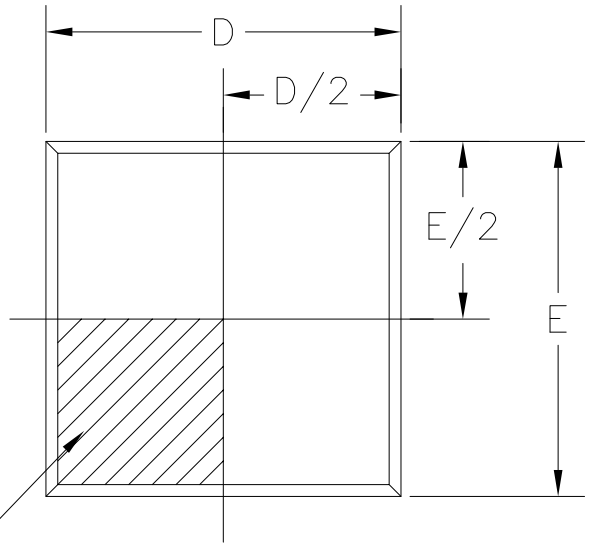
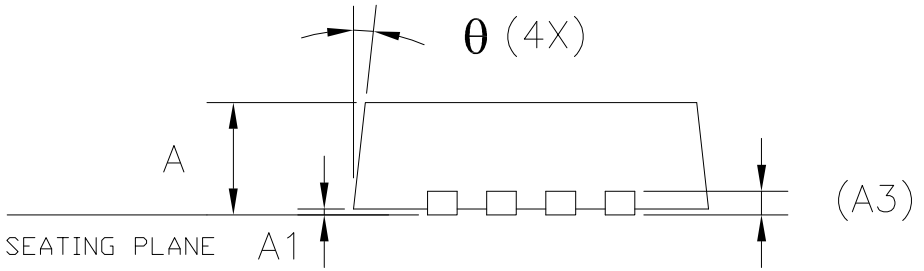
REVISION HISTORY			
REV.	DISCRIPTION	DATE	APP'D
A	DRAWING ORIGINATION – ECN# 1342–03	10/17/13	AD
B	**UPDATE FORMAT TO COMBINE ALL QFN PACKAGE OUTLINE DRAWINGS INTO POD–00000003.**	10/29/13	AD

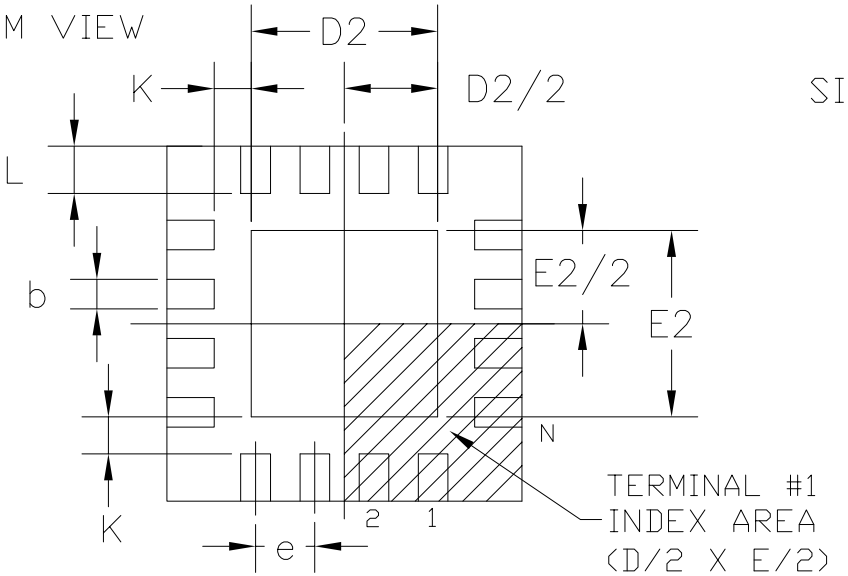
TOP VIEW





SIDE VIEW

BOTTOM VIEW



EXAR A New Direction in Mixed-Signal		EXAR CORPORATION	
		QFN PACKAGE OUTLINE	
Packaging Approval:		Drawing No: POD–00000003	
By: AD	Date: 10/29/13	Revision: B	Sheet: 1 OF 3

16LD 3x3 QFN (OPTION 1) JEDEC MO-220 Variation VEED-4						
SYMBOLS	DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.032	0.036	0.039
A1	0.00	0.02	0.05	0.000	0.001	0.002
A3	0.20 REF			0.008 REF		
b	0.18	0.25	0.30	0.007	0.010	0.012
D	3.00 BSC			0.118 BSC		
D2	1.50	1.65	1.80	0.060	0.065	0.071
E	3.00 BSC			0.118 BSC		
E2	1.50	1.65	1.80	0.060	0.065	0.071
e	0.50 BSC			0.020 BSC		
L	0.35	0.40	0.45	0.014	0.016	0.018
K	0.20	—	—	0.008	—	—
θ	0°	—	14°	0°	—	14°
N	16			16		
ND	4			4		
NE	4			4		

16LD 3x3 QFN (OPTION 4) JEDEC MO-220 Variation VEED						
SYMBOLS	DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)		
	MIN	NOM	MAX	MIN	NOM	MAX
A	—	—	1.00	—	—	0.039
A1	0.00	0.02	0.05	0.000	0.001	0.002
A3	0.20 REF			0.008 REF		
b	0.18	0.25	0.30	0.007	0.010	0.012
D	3.00 BSC			0.118 BSC		
D2	1.60	1.70	1.80	0.063	0.067	0.071
E	3.00 BSC			0.118 BSC		
E2	1.60	1.70	1.80	0.063	0.067	0.071
e	0.50 BSC			0.020 BSC		
L	0.30	0.40	0.50	0.012	0.016	0.020
K	0.20	—	—	0.008	—	—
θ	0°	—	14°	0°	—	14°
N	16			16		
ND	4			4		
NE	4			4		

24LD 4x4 QFN (OPTION 1) JEDEC MO-220 Variation VGGD-6						
SYMBOLS	DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.032	0.036	0.039
A1	0.00	0.02	0.05	0.000	0.001	0.002
A3	0.20 REF			0.008 REF		
b	0.18	0.25	0.30	0.007	0.010	0.012
D	4.00 BSC			0.157 BSC		
D2	2.50	2.65	2.80	0.098	0.104	0.110
E	4.00 BSC			0.157 BSC		
E2	2.50	2.65	2.80	0.098	0.104	0.110
e	0.50 BSC			0.020 BSC		
L	0.35	0.40	0.45	0.014	0.016	0.018
K	0.20	—	—	0.008	—	—
θ	0°	—	14°	0°	—	14°
N	24			24		
ND	6			6		
NE	6			6		

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

28LD 5x5 QFN (OPTION 1) JEDEC MO-220 Variation VHHD-3						
SYMBOLS	DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.032	0.035	0.039
A1	0.00	0.02	0.05	0.000	0.001	0.002
A3	0.20 REF			0.008 REF		
b	0.18	0.25	0.30	0.007	0.010	0.012
D	5.00 BSC			0.197 BSC		
D2	3.50	3.65	3.80	0.138	0.144	0.150
E	5.00 BSC			0.197 BSC		
E2	3.50	3.65	3.80	0.138	0.144	0.150
e	0.50 BSC			0.020 BSC		
L	0.35	0.40	0.45	0.014	0.016	0.018
K	0.20	—	—	0.008	—	—
θ	0°	—	14°	0°	—	14°
N	28			28		
ND	7			7		
NE	7			7		

16LD 3x3 QFN (OPTION 2) JEDEC MO-220 Variation VEED						
SYMBOLS	DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.032	0.036	0.039
A1	0.00	0.02	0.05	0.000	0.001	0.002
A3	0.20 REF			0.008 REF		
b	0.20	0.25	0.30	0.008	0.010	0.012
D	3.00 BSC			0.118 BSC		
D2	1.60	1.70	1.80	0.063	0.067	0.071
E	3.00 BSC			0.118 BSC		
E2	1.60	1.70	1.80	0.063	0.067	0.071
e	0.50 BSC			0.020 BSC		
L	0.25	0.30	0.35	0.010	0.012	0.014
K	0.20	—	—	0.008	—	—
θ	0°	—	14°	0°	—	14°
N	16			16		
ND	4			4		
NE	4			4		

16LD 4x4 QFN JEDEC MO-220 Variation VGGC-4						
SYMBOLS	DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.032	0.036	0.039
A1	0.00	0.02	0.05	0.000	0.001	0.002
A3	0.20 REF			0.008 REF		
b	0.25	0.30	0.35	0.010	0.012	0.014
D	4.00 BSC			0.157 BSC		
D2	2.20	2.40	2.60	0.087	0.094	0.102
E	4.00 BSC			0.157 BSC		
E2	2.20	2.40	2.60	0.087	0.094	0.102
e	0.65 BSC			0.026 BSC		
L	0.45	0.55	0.65	0.018	0.022	0.026
K	0.20	—	—	0.008	—	—
θ	0°	—	14°	0°	—	14°
N	16			16		
ND	4			4		
NE	4			4		

24LD 4x4 QFN (OPTION 2) JEDEC MO-220 Variation VGGD-8						
SYMBOLS	DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)		
	MIN	NOM	MAX	MIN	NOM	MAX
A	—	—	1.00	—	—	0.039
A1	0.00	0.02	0.05	0.000	0.001	0.002
A3	0.20 REF			0.008 REF		
b	0.18	0.25	0.30	0.007	0.010	0.012
D	4.00 BSC			0.157 BSC		
D2	2.20	2.45	2.60	0.087	0.096	0.102
E	4.00 BSC			0.157 BSC		
E2	2.20	2.45	2.60	0.087	0.096	0.102
e	0.50 BSC			0.020 BSC		
L	0.30	0.40	0.50	0.012	0.016	0.020
K	0.20	—	—	0.008	—	—
θ	0°	—	14°	0°	—	14°
N	24			24		
ND	6			6		
NE	6			6		

28LD 5x5 QFN (OPTION 2) JEDEC MO-220 Variation VHHD-3						
SYMBOLS	(Control Unit)			DIMENSIONS IN INCH (Reference Unit)		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.032	0.035	0.039
A1	0.00	0.02	0.05	0.000	0.001	0.002
A3	0.20 REF			0.008 REF		
b	0.18	0.25	0.30	0.007	0.010	0.012
D	5.00 BSC			0.197 BSC		
D2	3.15	3.25	3.35	0.124	0.128	0.132
E	5.00 BSC			0.197 BSC		
E2	3.15	3.25	3.35	0.124	0.128	0.132
e	0.50 BSC			0.020 BSC		
L	0.45	0.55	0.65	0.018	0.022	0.026
K	0.20	—	—	0.008	—	—
θ	0°	—	14°	0°	—	14°
N	28			28		
ND	7			7		
NE	7			7		

16LD 3x3 QFN (OPTION 3) JEDEC MO-220 Variation VEED						
SYMBOLS	DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.032	0.036	0.039
A1	0.00	0.02	0.05	0.000	0.001	0.002
A3	0.20 REF			0.008 REF		
b	0.20	0.25	0.30	0.008	0.010	0.012
D	3.00 BSC			0.118 BSC		
D2	1.60	1.70	1.80	0.063	0.067	0.071
E	3.00 BSC			0.118 BSC		
E2	1.60	1.70	1.80	0.063	0.067	0.071
e	0.50 BSC			0.020 BSC		
L	0.33	0.38	0.43	0.013	0.015	0.017
K	0.20	—	—	0.008	—	—
θ	0°	—	14°	0°	—	14°
N	16			16		
ND	4			4		
NE	4			4		

20LD 4x4 QFN JEDEC MO-220 Variation VGGD-5						
SYMBOLS	DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.032	0.035	0.039
A1	0.00	0.02	0.05	0.000	0.001	0.002
A3	0.20 REF			0.008 REF		
b	0.18	0.25	0.30	0.007	0.010	0.012
D	4.00 BSC			0.157 BSC		
D2	2.50	2.65	2.80	0.098	1.104	0.110
E	4.00 BSC			0.157 BSC		
E2	2.50	2.65	2.80	0.098	1.104	0.110
e	0.50 BSC			0.020 BSC		
L	0.35	0.40	0.45	0.014	0.016	0.018
K	0.20	—	—	0.008	—	—
θ	0°	—	14°	0°	—	14°
N	20			20		
ND	5			5		
NE	5			5		

24LD 4x4 QFN (OPTION 3) JEDEC MO-220 Variation VGGD-6						
SYMBOLS	DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.031	0.35	0.039
A1	0.00	0.02	0.05	0.000	0.001	0.002
A3	0.20 REF			0.008 REF		
b	0.20	0.25	0.30	0.079	0.010	0.012
D	4.00 BSC			0.157 BSC		
D2	2.50	2.65	2.80	0.098	0.104	0.110
E	4.00 BSC			0.157 BSC		
E2	2.50	2.65	2.80	0.098	0.104	0.110
e	0.50 BSC			0.020 BSC		
L	0.35	0.40	0.45	0.014	0.016	0.018
K	0.20	—	—	0.008	—	—
θ	0°	—	14°	0°	—	14°
N	24			24		
ND	6			6		
NE	6			6		

EXAR
A New Direction in Mixed-Signal

EXAR CORPORATION

QFN PACKAGE OUTLINE

Packaging Approval:		Drawing No:	POD-00000003
By: AD	Date: 10/29/13	Revision: B	Sheet: 2 OF 3

ECN 1344-16 11/01/2013

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

32LD 5x5 QFN (OPTION 1) JEDEC MO-220 Variation VHHD

SYMBOLS	DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.032	0.036	0.039
A1	0.00	0.02	0.05	0.000	0.001	0.002
A3	0.20 REF			0.008 REF		
b	0.18	0.25	0.30	0.007	0.010	0.012
D	5.00 BSC			0.197 BSC		
D2	3.00	3.10	3.20	0.118	0.122	0.126
E	5.00 BSC			0.197 BSC		
E2	3.00	3.10	3.20	0.118	0.122	0.126
e	0.50 BSC			0.020 BSC		
L	0.35	0.40	0.45	0.014	0.016	0.018
K	0.20	—	—	0.008	—	—
θ	0°	—	14°	0°	—	14°
N	32			32		
ND	8			8		
NE	8			8		

32LD 5x5 QFN (OPTION 2) JEDEC MO-220 Variation VHHD

SYMBOLS	DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.032	0.036	0.039
A1	0.00	0.02	0.05	0.000	0.001	0.002
A3	0.20 REF			0.008 REF		
b	0.18	0.25	0.30	0.007	0.010	0.012
D	5.00 BSC			0.197 BSC		
D2	3.75	3.80	3.85	0.148	0.150	0.152
E	5.00 BSC			0.197 BSC		
E2	3.75	3.80	3.85	0.148	0.150	0.152
e	0.50 BSC			0.020 BSC		
L	0.35	0.40	0.45	0.014	0.016	0.018
K	0.20	—	—	0.008	—	—
θ	0°	—	14°	0°	—	14°
N	32			32		
ND	8			8		
NE	8			8		

32LD 5x5 QFN (OPTION 3) JEDEC MO-220 Variation VHHD-4

SYMBOLS	DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.032	0.035	0.039
A1	0.00	0.02	0.05	0.000	0.001	0.002
A3	0.20 REF			0.008 REF		
b	0.18	0.25	0.30	0.007	0.010	0.012
D	5.00 BSC			0.197 BSC		
D2	3.50	3.65	3.80	0.138	0.144	0.150
E	5.00 BSC			0.197 BSC		
E2	3.50	3.65	3.80	0.138	0.144	0.150
e	0.50 BSC			0.020 BSC		
L	0.35	0.40	0.45	0.014	0.016	0.018
K	0.20	—	—	0.008	—	—
θ	0°	—	14°	0°	—	14°
N	32			32		
ND	8			8		
NE	8			8		

40LD 6x6 QFN (OPTION 1) JEDEC MO-220 Variation VJJD-5

SYMBOLS	DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.032	0.035	0.039
A1	0.00	0.02	0.05	0.000	0.001	0.002
A3	0.20 REF			0.008 REF		
b	0.18	0.25	0.30	0.007	0.010	0.012
D	6.00 BSC			0.236 BSC		
D2	4.50	4.65	4.80	0.177	0.183	0.189
E	6.00 BSC			0.236 BSC		
E2	4.50	4.65	4.80	0.177	0.183	0.189
e	0.50 BSC			0.020 BSC		
L	0.35	0.40	0.45	0.014	0.016	0.018
K	0.20	—	—	0.008	—	—
θ	0°	—	14°	0°	—	14°
N	40			40		
ND	10			10		
NE	10			10		

40LD 6x6 QFN (OPTION 2) JEDEC MO-220 Variation VJJD-5

SYMBOLS	DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.032	0.035	0.039
A1	0.00	0.02	0.05	0.000	0.001	0.002
A3	0.20 REF			0.008 REF		
b	0.20	0.25	0.30	0.008	0.010	0.012
D	6.00 BSC			0.236 BSC		
D2	4.30	4.40	4.50	0.167	0.173	0.179
E	6.00 BSC			0.236 BSC		
E2	4.30	4.40	4.50	0.167	0.173	0.179
e	0.50 BSC			0.020 BSC		
L	0.30	0.40	0.50	0.012	0.016	0.020
K	0.20	—	—	0.008	—	—
θ	0°	—	14°	0°	—	14°
N	40			40		
ND	10			10		
NE	10			10		

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

SYMBOLS	DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.032	0.035	0.039
A1	0.00	0.02	0.05	0.000	0.001	0.002
A3	0.20 REF			0.008 REF		
b	0.18	0.25	0.30	0.007	0.010	0.012
D	7.00 BSC			0.276 BSC		
D2	5.50	5.65	5.80	0.217	0.222	0.228
E	7.00 BSC			0.276 BSC		
E2	5.50	5.65	5.80	0.217	0.222	0.228
e	0.50 BSC			0.020 BSC		
L	0.35	0.40	0.45	0.014	0.016	0.018
K	0.20	—	—	0.008	—	—
θ	0°	—	14°	0°	—	14°
N	48			48		
ND	12			12		
NE	12			12		

56LD 8x8 QFN JEDEC MO-220 Variation VLLD

SYMBOLS	DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.032	0.035	0.039
A1	0.00	0.02	0.05	0.000	0.001	0.002
A3	0.20 REF			0.008 REF		
b	0.18	0.25	0.30	0.007	0.010	0.012
D	8.00 BSC			0.315 BSC		
D2	6.00	6.15	6.25	0.236	0.242	0.246
E	8.00 BSC			0.315 BSC		
E2	6.00	6.15	6.25	0.236	0.242	0.246
e	0.50 BSC			0.020 BSC		
L	0.30	0.40	0.50	0.012	0.016	0.020
K	0.20	—	—	0.008	—	—
θ	0°	—	14°	0°	—	14°
N	56			56		
ND	14			14		
NE	14			14		

64LD 9x9 QFN JEDEC MO-220 Variation VMMD

SYMBOLS	DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.032	0.035	0.039
A1	0.00	0.02	0.05	0.000	0.001	0.002
A3	0.20 REF			0.008 REF		
b	0.18	0.25	0.30	0.007	0.010	0.012
D	9.00 BSC			0.354 BSC		
D2	7.50	7.65	7.80	0.295	0.301	0.307
E	9.00 BSC			0.354 BSC		
E2	7.50	7.65	7.80	0.295	0.301	0.307
e	0.50 BSC			0.020 BSC		
L	0.35	0.40	0.45	0.014	0.016	0.018
K	0.20	—	—	0.008	—	—
θ	0°	—	14°	0°	—	14°
N	64			64		
ND	16			16		
NE	16			16		

EXAR
A New Direction in Mixed-Signal

EXAR CORPORATION

QFN PACKAGE OUTLINE

Packaging Approval:		Drawing No: POD-00000003	
By: AD	Date: 10/29/13	Revision: B	Sheet: 3 OF 3