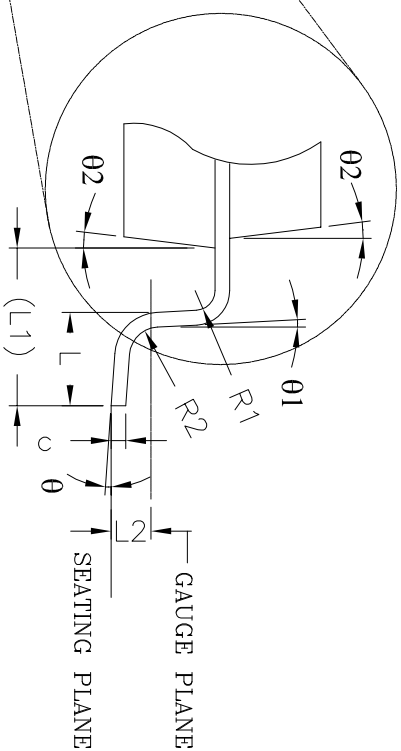
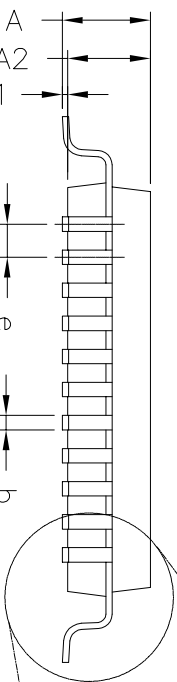
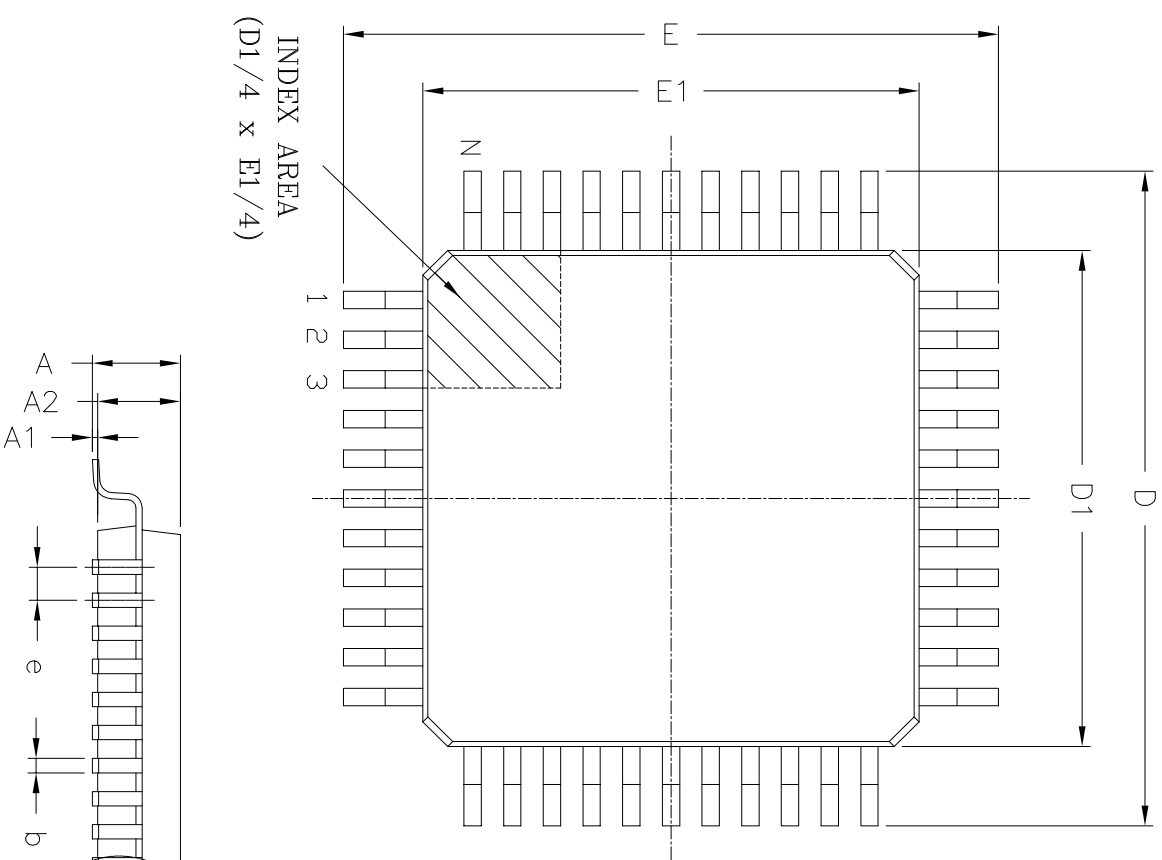



REVISION HISTORY			
REV.	DISCRIPTION	DATE	APP'D
A	DRAWING ORIGINATION	10/30/13	AD



		EXAR CORPORATION	
A New Direction in Mixed-Signal		LOFP PACKAGE OUTLINE	
Packaging Approval:		Drawing No:	POD-00000002
By: AD	Date: 10/30/13	Revision: A	Sheet: 1 OF 3

REVISION HISTORY

REV.	DESCRIPTION	DATE	APP'D
A	DRAWING ORIGINATION	10/30/13	AD

32 Pin 7x7 LOFP JEDEC MS-026 Variation BBA									
SYMBOLS		DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)				
		MIN	NOM	MAX	MIN	NOM	MAX		
A	—	—	1.60	—	—	—	0.063	—	—
A1	0.05	—	0.15	0.002	—	0.006	—	—	—
A2	1.35	1.40	1.45	0.053	0.055	0.057			
b	0.30	0.37	0.45	0.012	0.015	0.018			
c	0.09	—	0.20	0.004	—	0.008			
D	9.00 BSC			0.354 BSC					
D1	7.00 BSC			0.276 BSC					
E	9.00 BSC			0.354 BSC					
E1	7.00 BSC			0.276 BSC					
e	0.80 BSC			0.031 BSC					
L	0.45	0.60	0.75	0.018	0.024	0.030			
L1	1.00 REF			0.039 REF					
L2	0.25 BSC			0.010 BSC					
R1	0.08	—	—	0.003	—	—			
R2	0.08	—	0.20	0.003	—	0.008			
θ	0°	3.5°	7°	0°	3.5°	7°			
θ1	0°	—	—	0°	—	—			
θ2	11°	12°	13°	11°	12°	13°			
N	32			32					

52 Pin 10x10 LOFP JEDEC MS-026 Variation BCC									
SYMBOLS		DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)				
		MIN	NOM	MAX	MIN	NOM	MAX		
A	—	—	—	1.60	—	—	—	0.063	—
A1	0.05	—	—	0.15	0.002	—	—	0.006	—
A2	1.35	1.40	1.45	0.053	0.055	0.057			
b	0.22	0.32	0.38	0.009	0.013	0.015			
c	0.09	—	0.20	0.004	—	0.008			
D	12.00 BSC			0.472 BSC					
D1	10.00 BSC			0.394 BSC					
E	12.00 BSC			0.472 BSC					
E1	10.00 BSC			0.394 BSC					
e	0.65 BSC			0.026 BSC					
L	0.45	0.60	0.75	0.018	0.024	0.030			
L1	1.00 REF			0.039 REF					
L2	0.25 BSC			0.010 BSC					
R1	0.08	—	—	0.003	—	—			
R2	0.08	—	0.20	0.003	—	0.008			
θ	0°	3.5°	7°	0°	3.5°	7°			
θ1	0°	—	—	0°	—	—			
θ2	11°	12°	13°	11°	12°	13°			
N	52			52					

80 Pin 14x14 LOFP JEDEC MS-026 Variation BDD									
SYMBOLS		DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)				
		MIN	NOM	MAX	MIN	NOM	MAX		
A	—	—	1.60	—	—	—	0.063	—	—
A1	0.05	—	0.15	0.002	—	0.006	—	—	—
A2	1.35	1.40	1.45	0.053	0.055	0.057	—	—	—
b	0.22	0.32	0.38	0.009	0.013	0.015	—	—	—
c	0.09	—	0.20	0.004	—	0.008	—	—	—
D	16.00 BSC			0.630 BSC					
D1	14.00 BSC			0.551 BSC					
E	16.00 BSC			0.630 BSC					
E1	14.00 BSC			0.551 BSC					
e	0.65 BSC			0.026 BSC					
L	0.45	0.60	0.75	0.018	0.024	0.030			
L1	1.00 REF			0.039 REF					
L2	0.25 BSC			0.010 BSC					
R1	0.08	—	—	0.003	—	—			
R2	0.08	—	0.20	0.003	—	0.008			
θ	0°	3.5°	7°	0°	3.5°	7°			
θ1	0°	—	—	0°	—	—			
θ2	11°	12°	13°	11°	12°	13°			
N	80			80					

128 Pin 14x14 LOFP JEDEC MS-026 Variation BHB									
SYMBOLS		DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)				
		MIN	NOM	MAX	MIN	NOM	MAX		
A	—	—	1.60	—	—	—	0.063		
A1	0.05	—	0.15	0.002	—	0.006			
A2	1.35	1.40	1.45	0.053	0.055	0.057			
b	0.13	0.18	0.23	0.005	0.007	0.009			
c	0.09	—	0.20	0.004	—	0.008			
D	16.00 BSC			0.630 BSC					
D1	14.00 BSC			0.551 BSC					
E	16.00 BSC			0.630 BSC					
E1	14.00 BSC			0.551 BSC					
e	0.40 BSC			0.016 BSC					
L	0.45	0.60	0.75	0.018	0.024	0.030			
L1	1.00 REF			0.039 REF					
L2	0.25 BSC			0.010 BSC					
R1	0.08	—	—	0.003	—	—			
R2	0.08	—	0.20	0.003	—	0.008			
θ	0°	3.5°	7°	0°	3.5°	7°			
θ1	0°	—	—	0°	—	—			
θ2	11°	12°	13°	11°	12°	13°			
N	128			128					

44 Pin 0x10 LOFP JEDEC MS-026 Variation BCB									
SYMBOLS		DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)				
	MIN	NOM	MAX	MIN	NOM	MAX			
A	—	—	1.60	—	—	—	0.063		
A1	0.05	—	0.15	0.002	—	—	0.006		
A2	1.35	1.40	1.45	0.053	0.055	0.057			
b	0.30	0.37	0.45	0.012	0.015	0.018			
c	0.09	—	0.20	0.004	—	0.008			
D	12.00 BSC			0.472 BSC					
D1	10.00 BSC			0.394 BSC					
E	12.00 BSC			0.472 BSC					
E1	10.00 BSC			0.394 BSC					
e	0.80 BSC			0.031 BSC					
L	0.45	0.60	0.75	0.018	0.024	0.030			
L1	1.00 REF			0.039 REF					
L2	0.25 BSC			0.010 BSC					
R1	0.08	—	—	0.003	—	—			
R2	0.08	—	0.20	0.003	—	0.008			
θ	0°	3.5°	7°	0°	3.5°	7°			
θ1	0°	—	—	0°	—	—			
θ2	11°	12°	13°	11°	12°	13°			
N	44			44					

64 Pin 10x10 LOFP JEDEC MS-026 Variation BCD									
SYMBOLS		DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)				
		MIN	NOM	MAX	MIN	NOM	MAX		
A	—	—	1.60	—	—	—	0.063		
A1	0.05	—	0.15	0.002	—	0.006	—		
A2	1.35	1.40	1.45	0.053	0.055	0.057			
b	0.17	0.22	0.27	0.007	0.009	0.011			
c	0.09	—	0.20	0.004	—	0.008			
D	12.00 BSC			0.472 BSC					
D1	10.00 BSC			0.394 BSC					
E	12.00 BSC			0.472 BSC					
E1	10.00 BSC			0.394 BSC					
e	0.50 BSC			0.020 BSC					
L	0.45	0.60	0.75	0.018	0.024	0.030			
L1	1.00 REF			0.039 REF					
L2	0.25 BSC			0.010 BSC					
R1	0.08	—	—	0.003	—	—			
R2	0.08	—	0.20	0.003	—	0.008			
θ	0°	3.5°	7°	0°	3.5°	7°			
θ1	0°	—	—	0°	—	—			
θ2	11°	12°	13°	11°	12°	13°			
N	—	64	—	—	—	64	—		

100 Pin 14x14 LOFP JEDEC MS-026 Variation BED									
SYMBOLS		DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)				
	MIN	NOM	MAX	MIN	NOM	MAX			
A	—	—	1.60	—	—	—	0.063		
A1	0.05	—	—	0.15	0.002	—	0.006		
A2	1.35	1.40	1.45	0.053	0.055	0.057			
b	0.17	0.22	0.27	0.007	0.009	0.011			
c	0.09	—	0.20	0.004	—	0.008			
D	16.00 BSC			0.630 BSC					
D1	14.00 BSC			0.551 BSC					
E	16.00 BSC			0.630 BSC					
E1	14.00 BSC			0.551 BSC					
e	0.50 BSC			0.020 BSC					
L	0.45	0.60	0.75	0.018 0.024 0.030					
L1	1.00 REF			0.039 REF					
L2	0.25 BSC			0.010 BSC					
R1	0.08	—	—	0.003			—		
R2	0.08	—	0.20	0.003			—	0.008	
θ	0°	3.5°	7°	0°			3.5°	7°	
θ1	0°	—	—	0°			—	—	
θ2	11°	12°	13°	11°			12°	13°	
N	100			100					

144 Pin 20x20 LOFP JEDEC MS-026 Variation BFB									
SYMBOLS		DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)				
		MIN	NOM	MAX	MIN	NOM	MAX		
A	—	—	1.60	—	—	—	0.063	—	—
A1	0.05	—	0.15	0.002	—	0.006	—	—	—
A2	1.35	1.40	1.45	0.053	0.055	0.057	—	—	—
b	0.17	0.22	0.27	0.007	0.009	0.011	—	—	—
c	0.09	—	0.20	0.004	—	0.008	—	—	—
D	22.00	BSC	—	0.866	BSC	—	—	—	—
D1	20.00	BSC	—	0.787	BSC	—	—	—	—
E	22.00	BSC	—	0.866	BSC	—	—	—	—
E1	20.00	BSC	—	0.787	BSC	—	—	—	—
e	0.50	BSC	—	0.020	BSC	—	—	—	—
L	0.45	0.60	0.75	0.018	0.024	0.030	—	—	—
L1	1.00	REF	—	0.039	REF	—	—	—	—
L2	0.25	BSC	—	0.010	BSC	—	—	—	—
R1	0.08	—	—	0.003	—	—	—	—	—
R2	0.08	—	0.20	0.003	—	0.008	—	—	—
θ	0°	3.5°	7°	0°	3.5°	7°	—	—	—
θ1	0°	—	—	0°	—	—	—	—	—
θ2	11°	12°	13°	11°	12°	13°	—	—	—
N	—	144	—	—	—	144	—	—	—


48 Pin 7x7 LOFP JEDEC MS-026 Variation BSC							
SYMBOLS		DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)		
	MIN	NOM	MAX	MIN	NOM	MAX	
A	—	—	1.60	—	—	0.063	
A1	0.05	—	0.15	0.002	—	0.006	
A2	1.35	1.40	1.45	0.053	0.055	0.057	
b	0.17	0.22	0.27	0.007	0.009	0.011	
c	0.09	—	0.20	0.004	—	0.008	
D	9.00 BSC			0.354 BSC			
D1	7.00 BSC			0.276 BSC			
E	9.00 BSC			0.354 BSC			
E1	7.00 BSC			0.276 BSC			
e	0.50 BSC			0.020 BSC			
L	0.45	0.60	0.75	0.018	0.024	0.030	
L1	1.00 REF			0.039 REF			
L2	0.25 BSC			0.010 BSC			
R1	0.08	—	—	0.003	—	—	
R2	0.08	—	0.20	0.003	—	0.008	
θ	0°	3.5°	7°	0°	3.5°	7°	
θ1	0°	—	—	0°	—	—	
θ2	11°	12°	13°	11°	12°	13°	
N	48			48			

80 Pin 12x12 LOFP JEDEC MS-026 Variation BDD						
SYMBOLS		DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)	
	MIN	NOM	MAX	MIN	NOM	MAX
A	—	—	1.60	—	—	0.063
A1	0.05	—	0.15	0.002	—	0.006
A2	1.35	1.40	1.45	0.053	0.055	0.057
b	0.17	0.22	0.27	0.007	0.009	0.011
c	0.09	—	0.20	0.004	—	0.008
D	14.00 BSC			0.551 BSC		
D1	12.00 BSC			0.472 BSC		
E	14.00 BSC			0.551 BSC		
E1	12.00 BSC			0.472 BSC		
e	0.50 BSC			0.020 BSC		
L	0.45	0.60	0.75	0.018	0.024	0.030
L1	1.00 REF			0.039 REF		
L2	0.25 BSC			0.010 BSC		
R1	0.08	—	—	0.003	—	—
R2	0.08	—	0.20	0.003	—	0.008
ø	0	3.5	7	0	3.5	7
ø1	0	—	—	0	—	—
ø2	1.1	1.2	1.3	1.1	1.2	1.3
N	80			80		

REVISION HISTORY			
REV.	DISCRIPTION	DATE	APP'D
A	DRAWING ORIGINATION	10/30/13	AD

176 Pin 24x24 LQFP JEDEC MS-026 Variation BGA									
SYMBOLS	DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)					
	MIN	NOM	MAX	MIN	NOM	MAX			
A	—	—	1.60	—	—	0.063			
A1	0.05	—	0.15	0.002	—	0.006			
A2	1.35	1.40	1.45	0.053	0.055	0.057			
b	0.17	0.22	0.27	0.007	0.009	0.011			
c	0.09	—	0.20	0.004	—	0.008			
D	26.00 BSC			1.024 BSC					
D1	24.00 BSC			0.945 BSC					
E	26.00 BSC			1.024 BSC					
E1	24.00 BSC			0.945 BSC					
e	0.50 BSC			0.020 BSC					
L	0.45	0.60	0.75	0.018	0.024	0.030			
L1	1.00 REF			0.039 REF					
L2	0.25 BSC			0.010 BSC					
R1	0.08	—	—	0.003	—	—			
R2	0.08	—	0.20	0.003	—	0.008			
θ	0°	3.5°	7°	0°	3.5°	7°			
θ1	0°	—	—	0°	—	—			
θ2	11°	12°	13°	11°	12°	13°			
N	176			176					

208 Pin 28x28 LQFP JEDEC MS-026 Variation BJB									
SYMBOLS	DIMENSIONS IN MM (Control Unit)			DIMENSIONS IN INCH (Reference Unit)					
	MIN	NOM	MAX	MIN	NOM	MAX			
A	—	—	1.60	—	—	0.063			
A1	0.05	—	0.15	0.002	—	0.006			
A2	1.35	1.40	1.45	0.053	0.055	0.057			
b	0.17	0.22	0.27	0.007	0.009	0.011			
c	0.09	—	0.20	0.004	—	0.008			
D	30.00 BSC			1.181 BSC					
D1	28.00 BSC			1.102 BSC					
E	30.00 BSC			1.181 BSC					
E1	28.00 BSC			1.102 BSC					
e	0.50 BSC			0.020 BSC					
L	0.45	0.60	0.75	0.018	0.024	0.030			
L1	1.00 REF			0.039 REF					
L2	0.25 BSC			0.010 BSC					
R1	0.08	—	—	0.003	—	—			
R2	0.08	—	0.20	0.003	—	0.008			
θ	0°	3.5°	7°	0°	3.5°	7°			
θ1	0°	—	—	0°	—	—			
θ2	11°	12°	13°	11°	12°	13°			
N	208			208					

		EXAR CORPORATION	
Packaging Approval:		LQFP PACKAGE OUTLINE	
By: AD	Date: 10/30/13	Drawing No: POD-00000002	Revision: A
		Sheet: 3 OF 3	