



Packaging

Product Specification

PS007229-1010



Warning: DO NOT USE IN LIFE SUPPORT

LIFE SUPPORT POLICY

ZILOG'S PRODUCTS ARE NOT AUTHORIZED FOR USE AS CRITICAL COMPONENTS IN LIFE SUPPORT DEVICES OR SYSTEMS WITHOUT THE EXPRESS PRIOR WRITTEN APPROVAL OF THE PRESIDENT AND GENERAL COUNSEL OF ZILOG CORPORATION.

As used herein

Life support devices or systems are devices which (a) are intended for surgical implant into the body, or (b) support or sustain life and whose failure to perform when properly used in accordance with instructions for use provided in the labeling can be reasonably expected to result in a significant injury to the user. A critical component is any component in a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system or to affect its safety or effectiveness.

Document Disclaimer

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Marketing Drawings

For the latest updates on the following package drawings, please contact Zilog Customer Service at zservice@zilog.com.

Plastics

Lead Type	Part Number
Marketing Outline, 8-Lead Plastic DIP	MKT71C1177-00
Marketing Outline, 18-Lead Plastic DIP	MKT71C0002-00
Marketing Outline, 20-Lead Plastic DIP	MKT71C0719-00
Marketing Outline, 28-Lead Plastic DIP	MKT71C0004-00
Marketing Outline, 40-Lead Plastic DIP	MKT71C0005-00
Marketing Outline, 48-Lead Plastic DIP	MKT71C0006-00
Marketing Outline, 64-Lead Plastic DIP	MKT71C0009-00
Marketing Outline, 28-Lead Plastic Chip Carrier	MKT71C1172-00
Marketing Outline, 44-Lead Plastic Chip Carrier	MKT71C1001-00
Marketing Outline, 68-Lead Plastic Chip Carrier	MKT71C1000-00
Marketing Outline, 84-Lead Plastic Chip Carrier	MKT71C1003-00
Marketing Outline, 80-Lead Plastic Quad Flat Pack	MKT71C1151-00
Marketing Outline, 100-Lead Plastic Quad Flat Pack	MKT71C1153-00
Marketing Outline, 144-Lead Quad Flat Pack	MKT71C1163-00
Marketing Outline, 32-Lead LQFP (7 x 7 x 1.4 mm)	MKT71C1202-00
Marketing Outline, 44-Lead LQFP (10x10x1.4mm)	MKT71C1182-00
Marketing Outline, 64-Lead LQFP (10X10X1.4MM)	MKT71C1167-00
Marketing Outline, 64-Lead LQFP (14x14x1.4mm)	MKT71C1176-00
Marketing Outline, 100-Lead LQFP	MKT71C1159-00
Marketing Outline, 144-Lead LQFP	MKT71C1173-00
Marketing Outline, 8-Lead SOIC	MKT71C1178-00
Marketing Outline, 18-Lead SOIC	MKT71C1156-00
Marketing Outline, 20-Lead SOIC	MKT71C1164-00
Marketing Outline, 28-Lead SOIC	MKT71C1154-00
Marketing Outline, 20-Lead SSOP	MKT71C1168-00
Marketing Outline, 28-Lead SSOP	MKT71C1180-00
Marketing Outline, 48-Lead SSOP	MKT71C1190-00
Marketing Outline, 144-Lead BGA (13X13 MM, 1.0 MM Pitch LBGA))	MKT71C1193-00
Marketing Outline, 8-Lead QFN (5 x 6 x 0.9 mm)	MKT71C1203-00
Marketing Outline, 20-Lead QFN (5 x 5 x 0.9mm)	MKT71C1206-00
Marketing Outline, 28-Lead QFN (5 x 5 x 0.9mm)	MKT71C1204-00
Marketing Outline, 32-Lead QFN (5 x 5 x 0.9mm)	MKT71C1205-00
Marketing Outline, 44-Lead QFN (7 x 7 x 0.9mm)	MKT71C1198-00

IrDA

ZHX1810
ZHX1820

Marketing Outline, 8-Lead PDIP

REVISIONS				
CN#	LTR	DESCRIPTION	DATE	APPROVED
20935	C	To conform with Jedec and subcon's ref dim. Jedec's D1 dim is 0.005"	06-29-06	M. Fonte

SYMBOL	MILLIMETER		INCH	
	MIN	MAX	MIN	MAX
A1	0.38	0.81	0.015	0.032
A2	3.25	3.81	0.128	0.150
B	0.38	0.53	0.015	0.021
B1	1.40	1.65	0.055	0.065
C	0.20	0.30	0.008	0.012
D	9.02	9.78	0.355	0.385
E	7.62	8.26	0.300	0.325
E1	6.10	6.60	0.240	0.260
e	2.54 BSC		0.100 BSC	
eA	7.87	9.14	0.310	0.360
L	3.18	3.43	0.125	0.135
Q1	1.40	1.65	0.055	0.065
D1	0.46	-	0.018	-

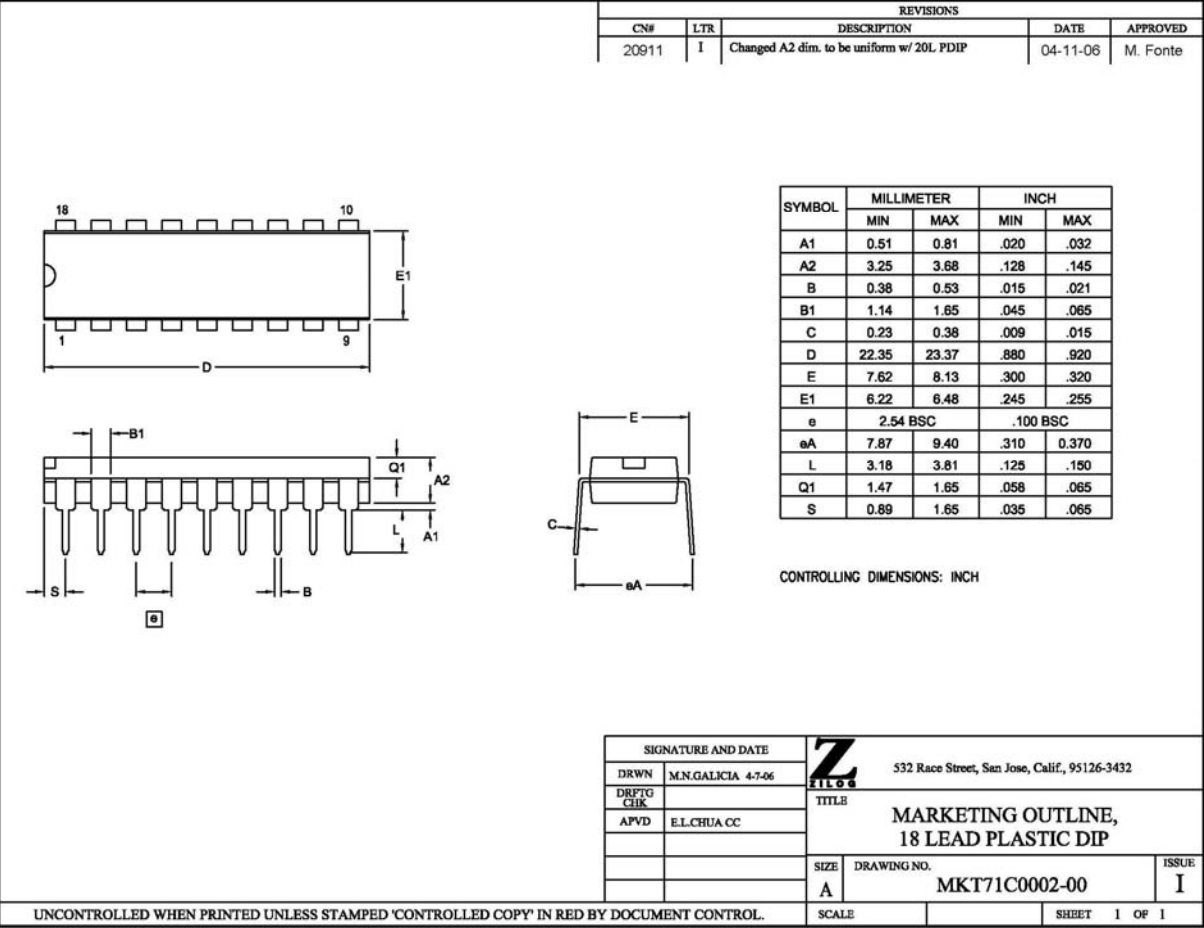
CONTROLLING DIMENSIONS : MM.

SIGNATURE AND DATE			532 Race Street, San Jose, Calif., 95126-3432	
DRWN	M.N.GALICIA 6-6-06			
DRFTG				
CHK				
APVD	E.L.CHUA CC			
		TITLE	MARKETING OUTLINE, 8 LEAD PDIP	
		SIZE	DRAWING NO.	ISSUE
		A	MKT71C1177-00	D

UNCONTROLLED WHEN PRINTED UNLESS STAMPED 'CONTROLLED COPY' IN RED BY DOCUMENT CONTROL.

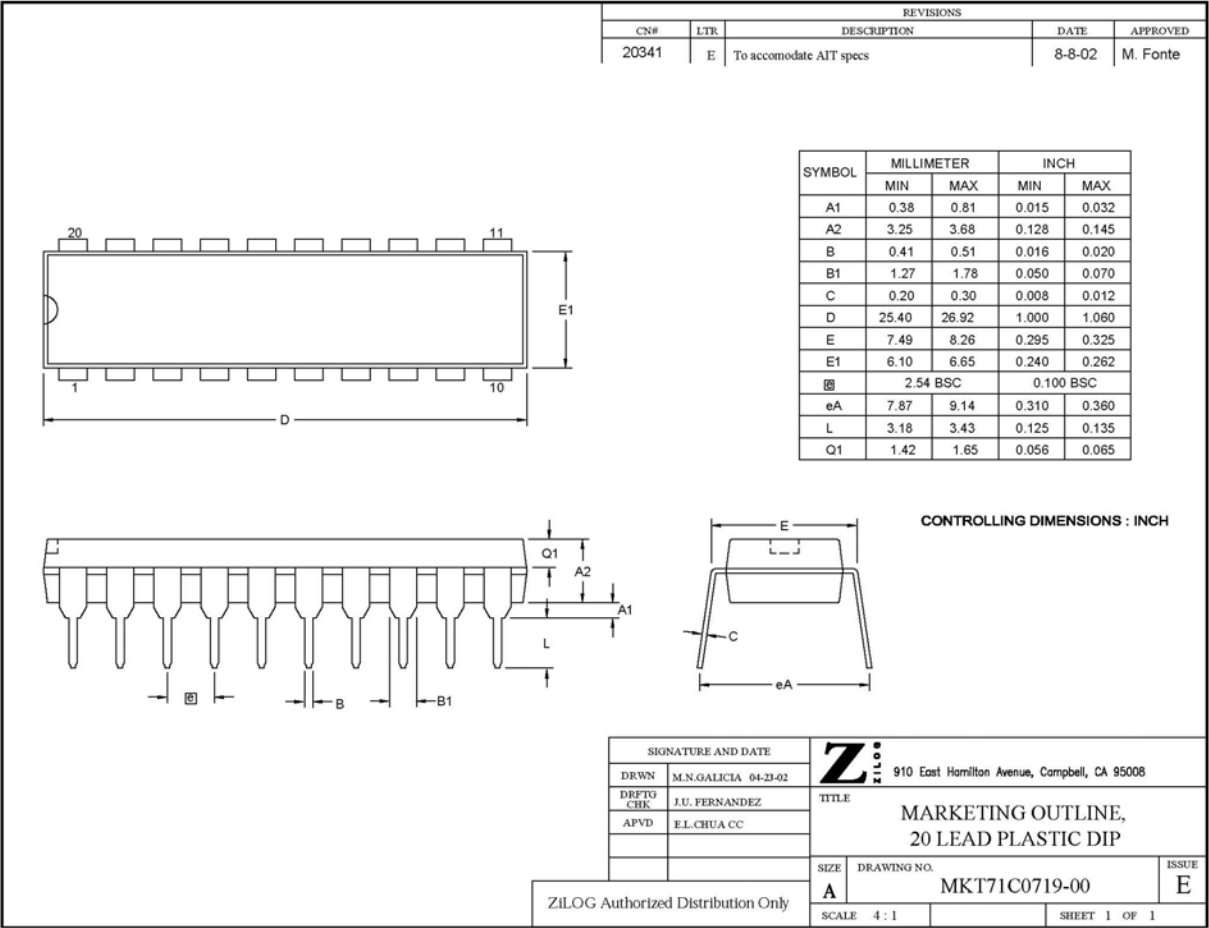
SCALE		SHEET	1 OF 1
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Marketing Outline, 18-Lead PDIP





Marketing Outline, 20-Lead PDIP





Marketing Outline, 28-Lead PDIP

ZILOG CONFIDENTIAL

REVISIONS	
DESCRIPTION	
N	Use updated preprinted form.

SYMBOL	OPT #	MILLIMETER		INCH	
		MIN	MAX	MIN	MAX
A1		0.38	1.02	.015	.040
A2		3.18	4.19	.125	.165
B		0.38	0.53	.015	.021
B1	01	1.40	1.65	.055	.065
	02	1.14	1.40	.045	.055
C		0.23	0.38	.009	.015
D	01	36.58	37.34	1.440	1.470
	02	35.31	35.94	1.390	1.415
E		15.24	15.75	.600	.620
E1	01	13.59	14.10	.535	.555
	02	12.83	13.08	.505	.515
Q1		2.54 TYP		.100 BSC	
eA		15.49	16.76	.610	.660
L		3.05	3.81	.120	.150
Q1	01	1.40	1.91	.055	.075
	02	1.40	1.88	.055	.074
S	01	1.52	2.29	.060	.090
	02	1.02	1.52	.040	.060

CONTROLLING DIMENSIONS : INCH

OPTION TABLE	
OPTION #	PACKAGE
01	STANDARD
02	IDF

Note: Zilog supplies both options for production. Component layout PCB design should cover bigger option 01.

SIGNATURE AND DATE	
DRWN	M.N.GALICIA 1-15-10
DRFTG CHK	
APVD	R.L.CHUA CC

zilog 6800 Santa Teresa Blvd, San Jose, CA 95119

TITLE
MARKETING OUTLINE, 28 LEAD
PLASTIC DIP

SIZE: DRAWING NO.
A MKT71C0004-00

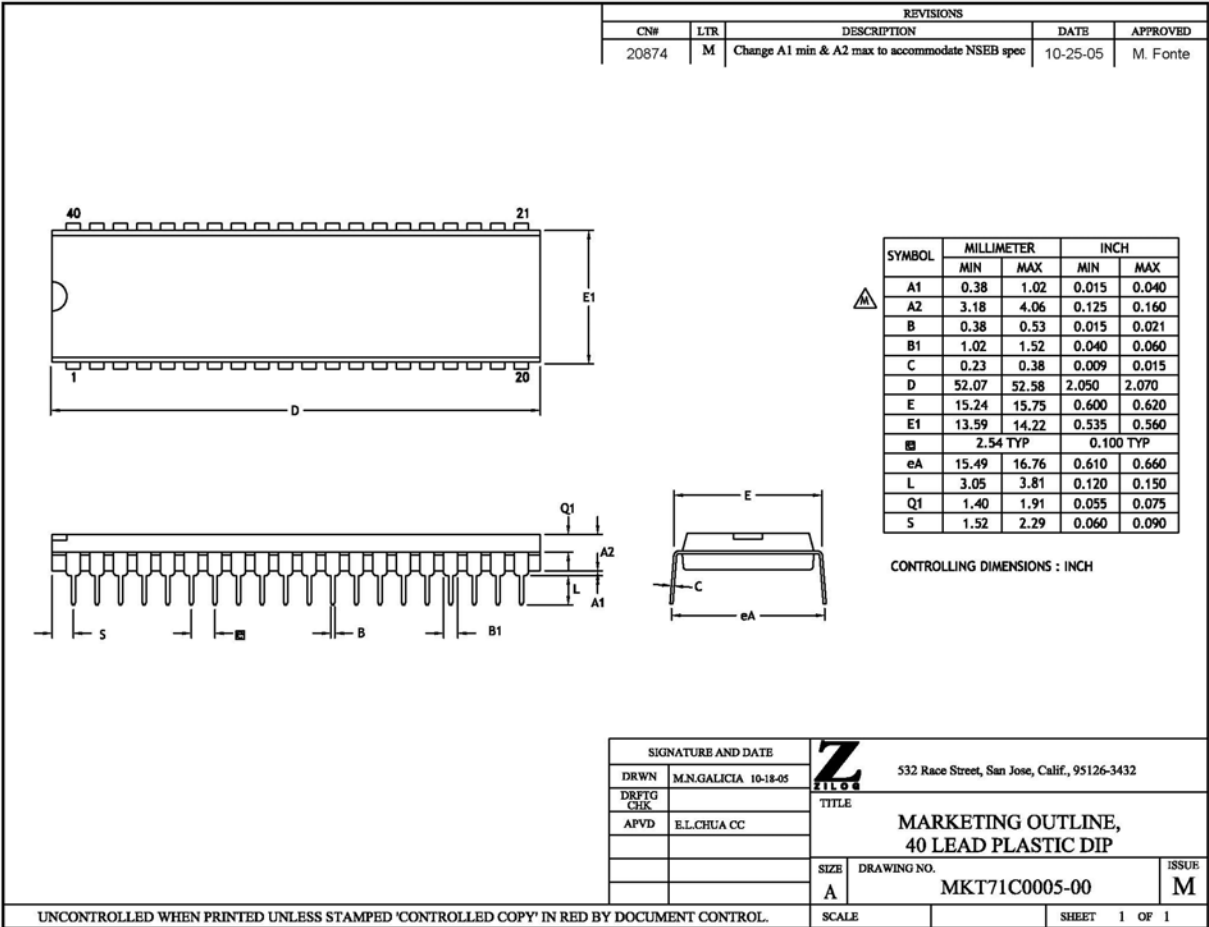
ISSUE
N

SCALE

SHEET 1 OF 1

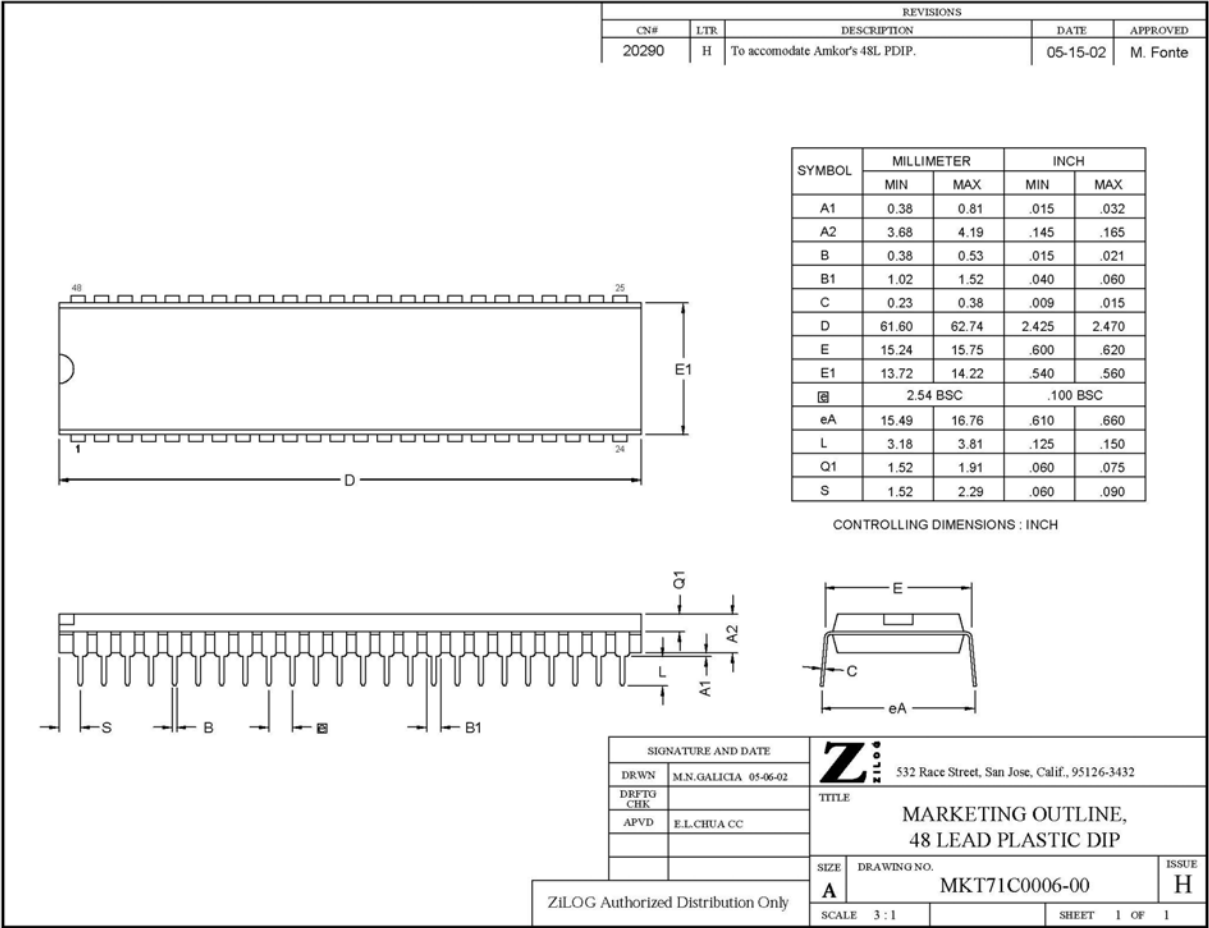
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Marketing Outline, 40-Lead PDIP

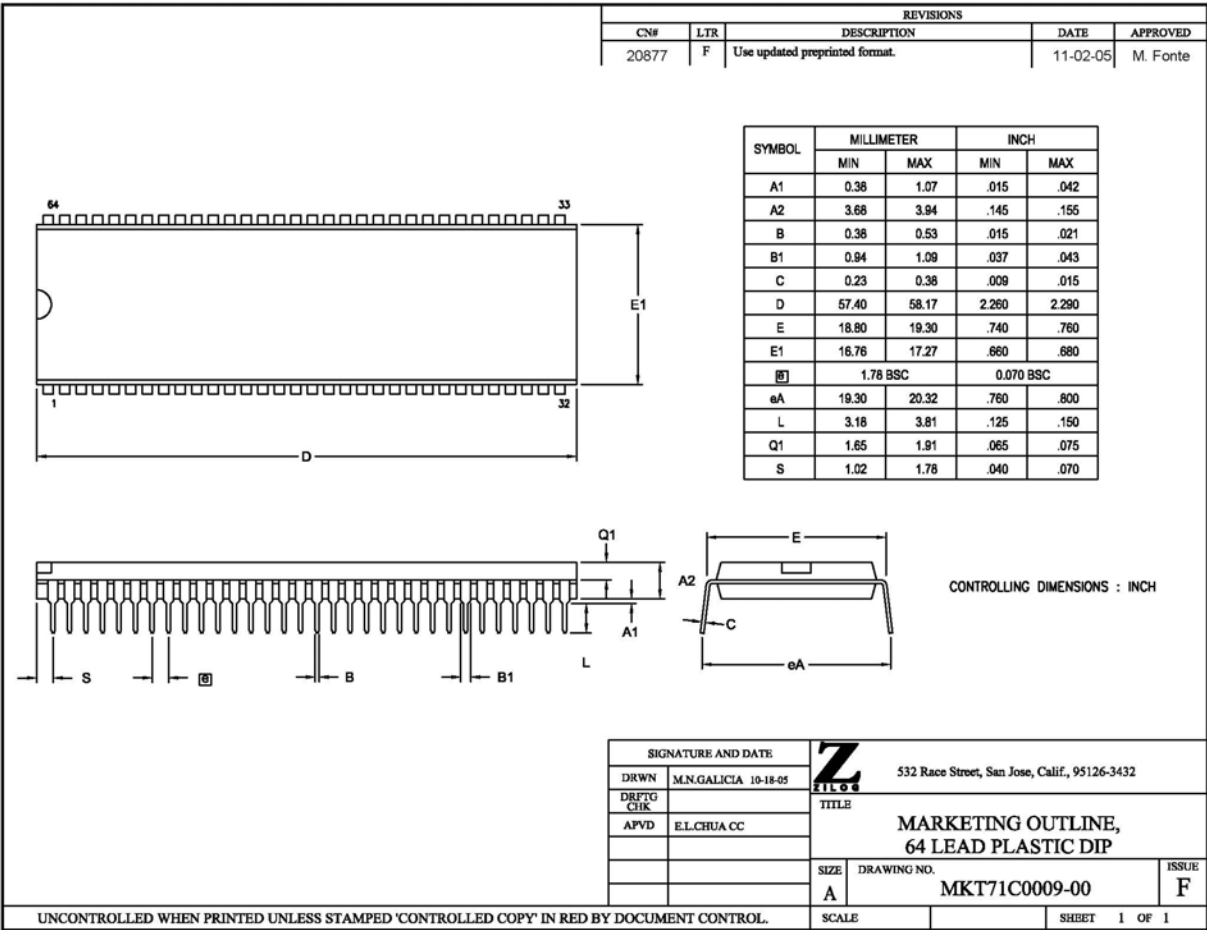




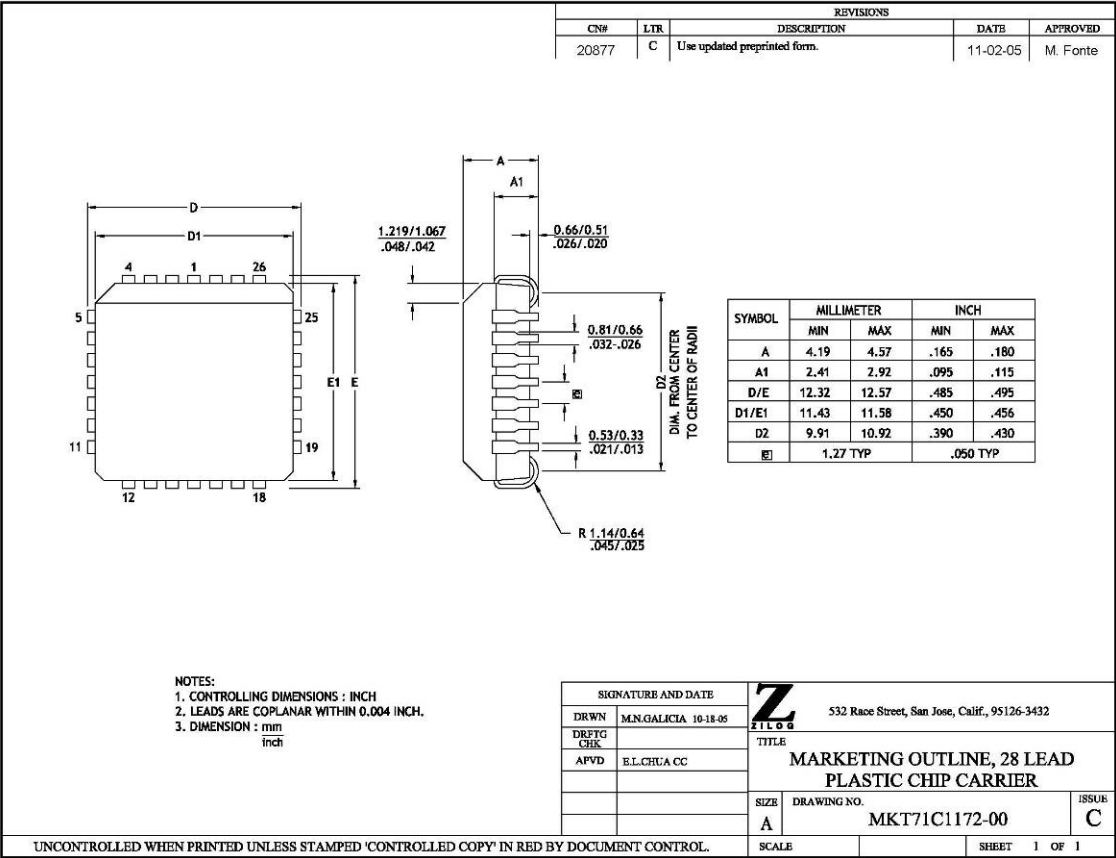
Marketing Outline, 48-Lead PDIP



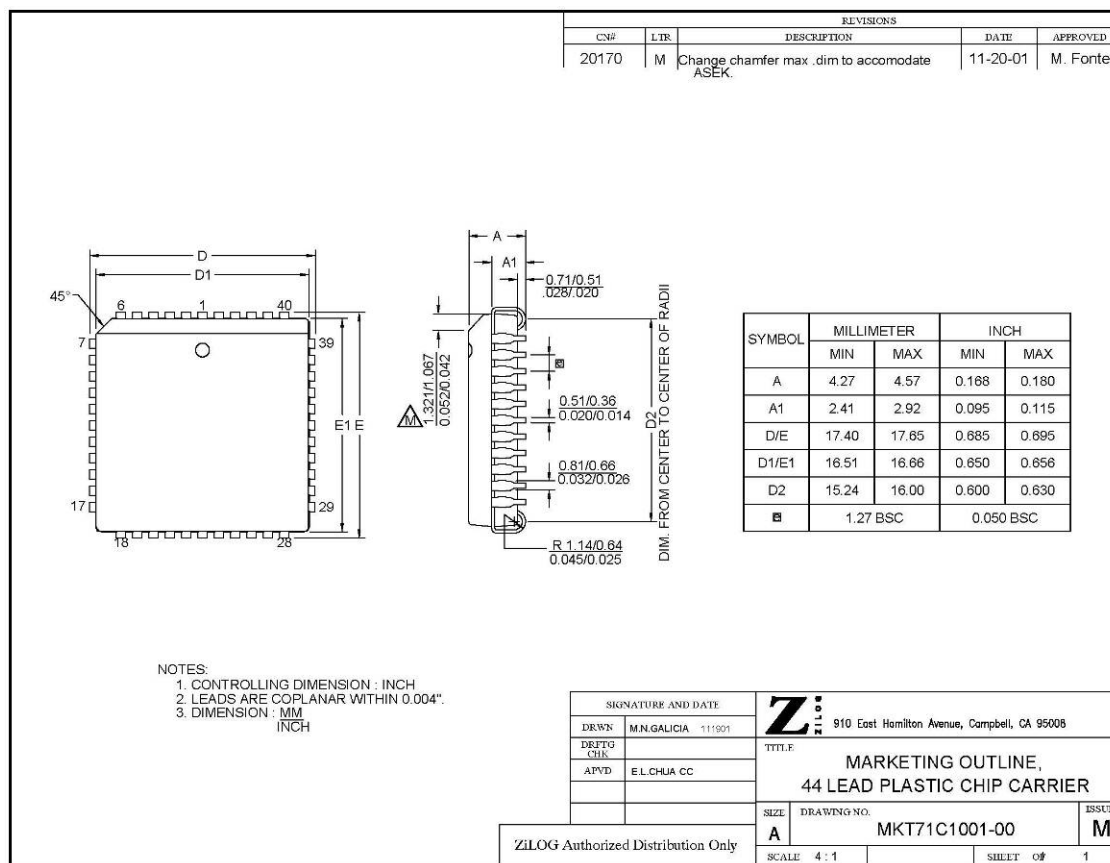
Marketing Outline, 64-Lead PDIP



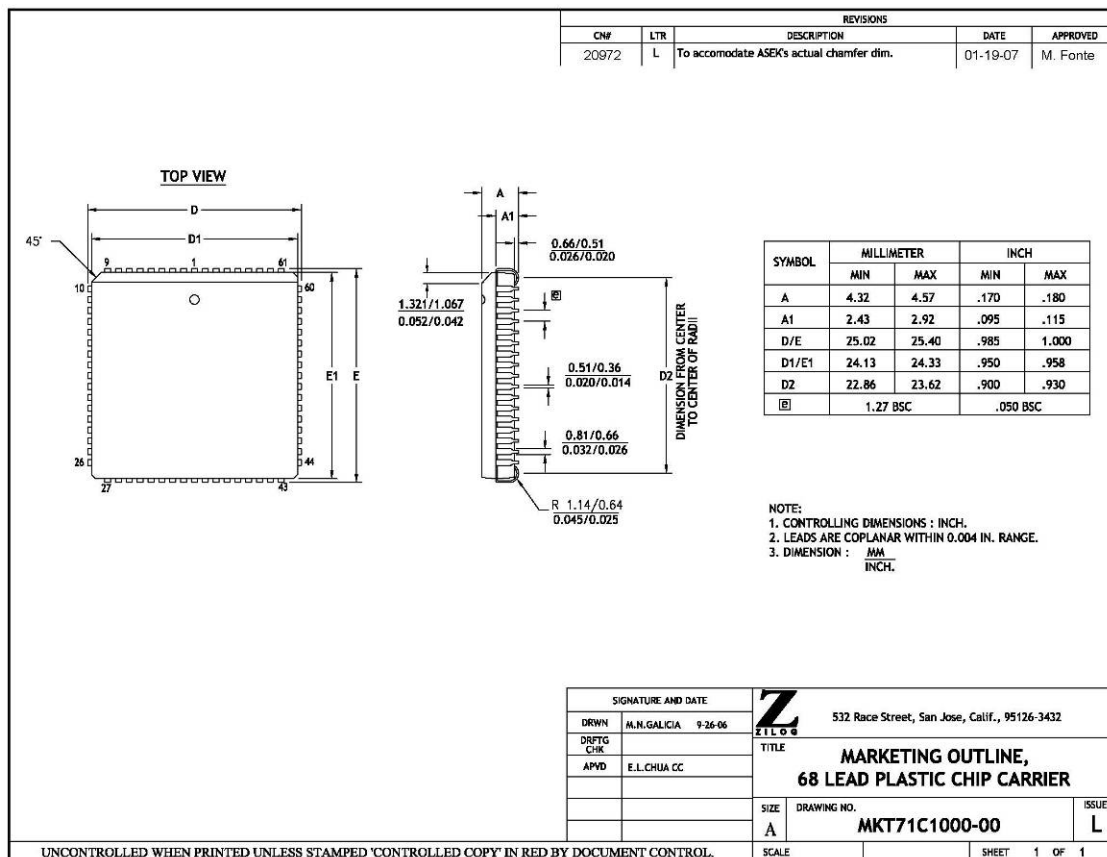
Marketing Outline, 28-Lead Plastic Chip Carrier



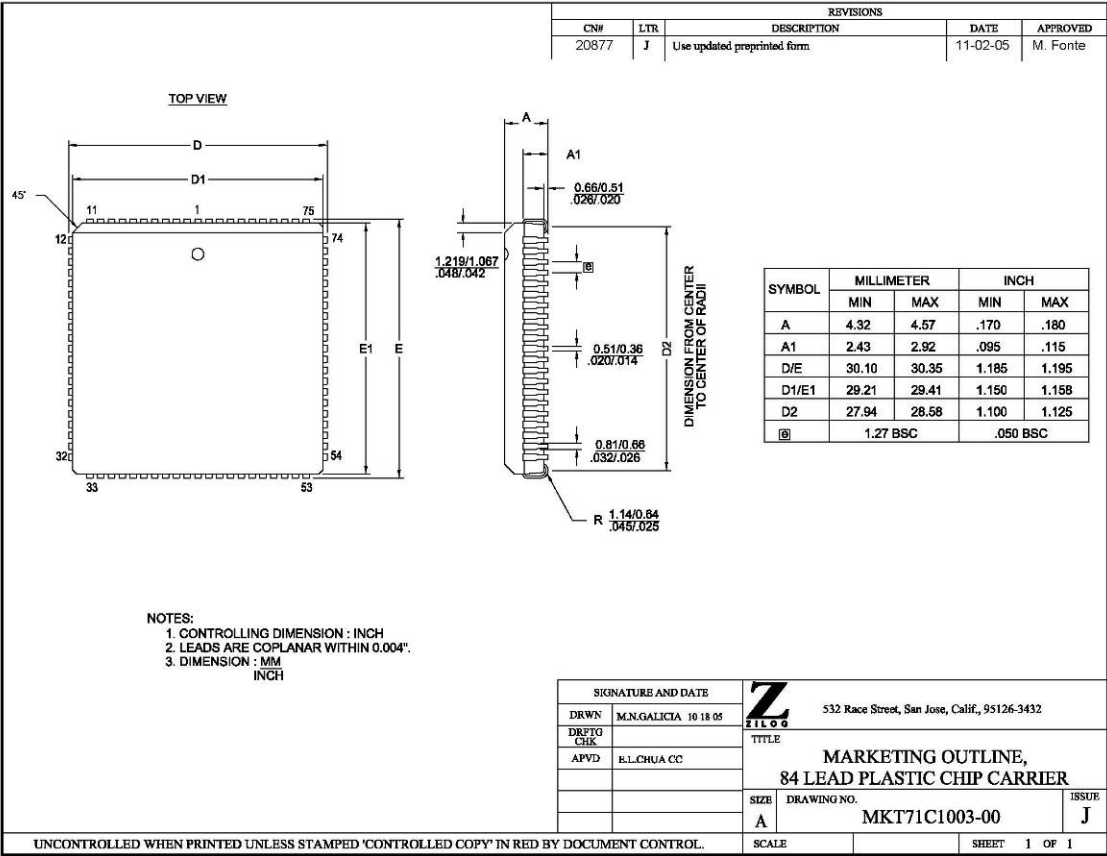
Marketing Outline, 44-Lead Plastic Chip Carrier



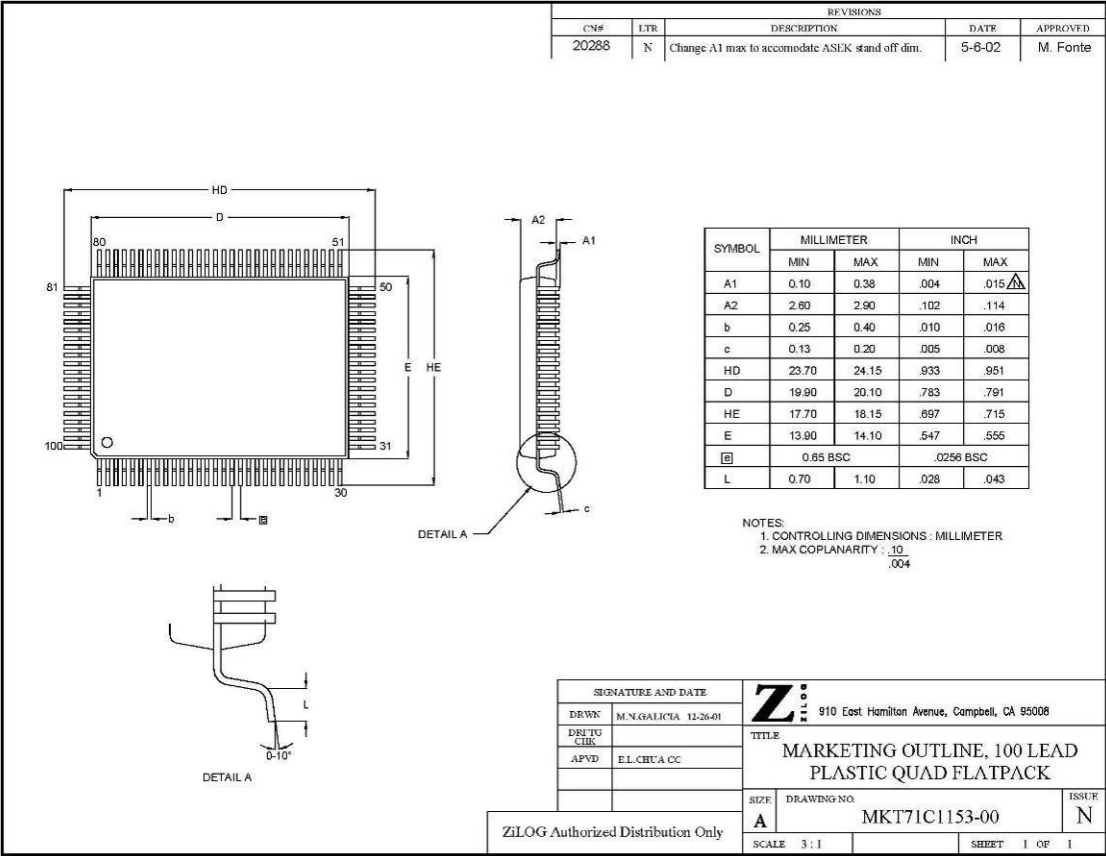
Marketing Outline, 68-Lead Plastic Chip Carrier



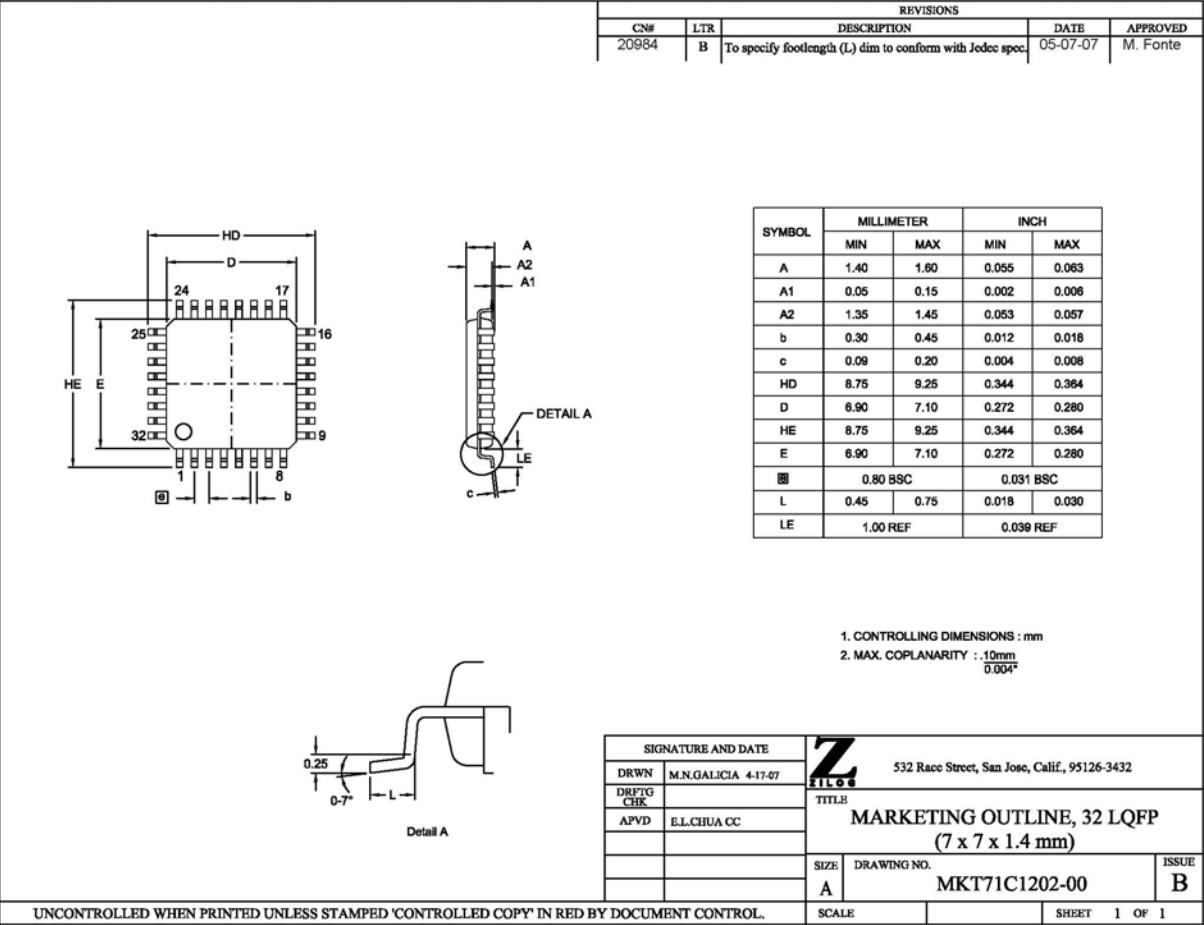
Marketing Outline, 84-Lead Plastic Chip Carrier



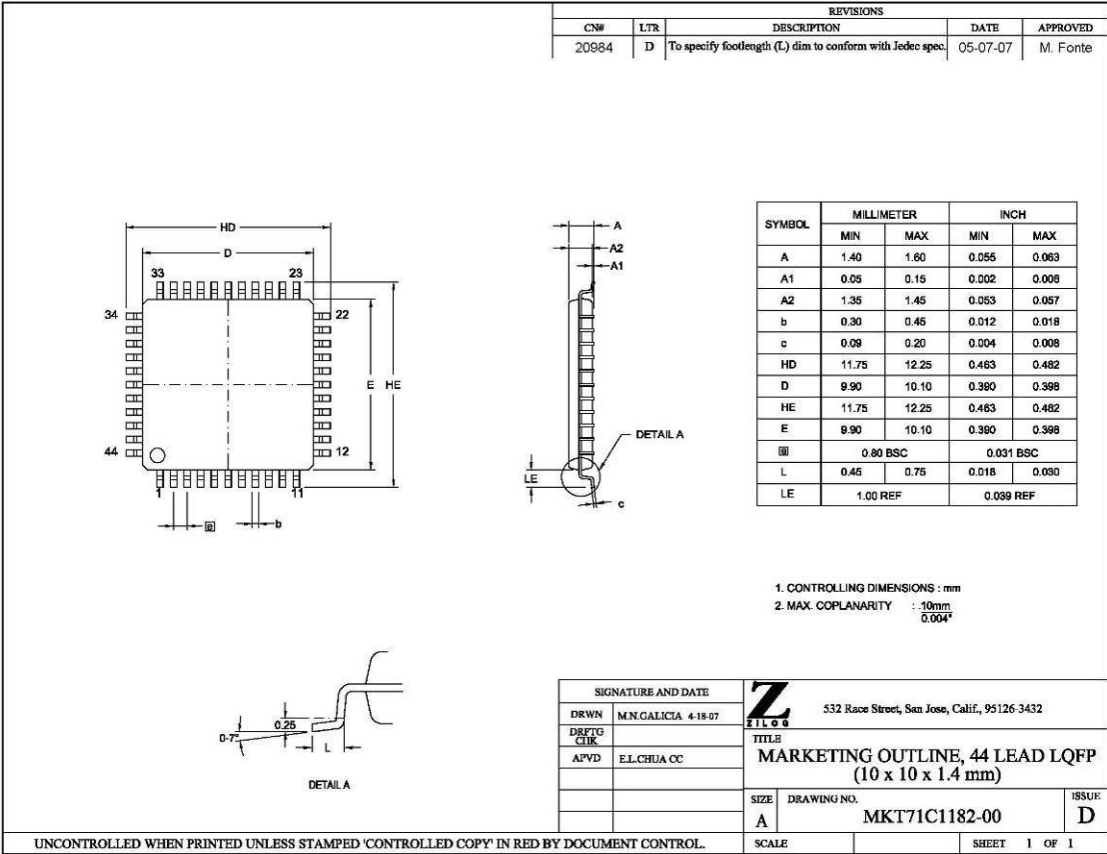
Marketing Outline, 100-Lead Plastic Quad Flatpack



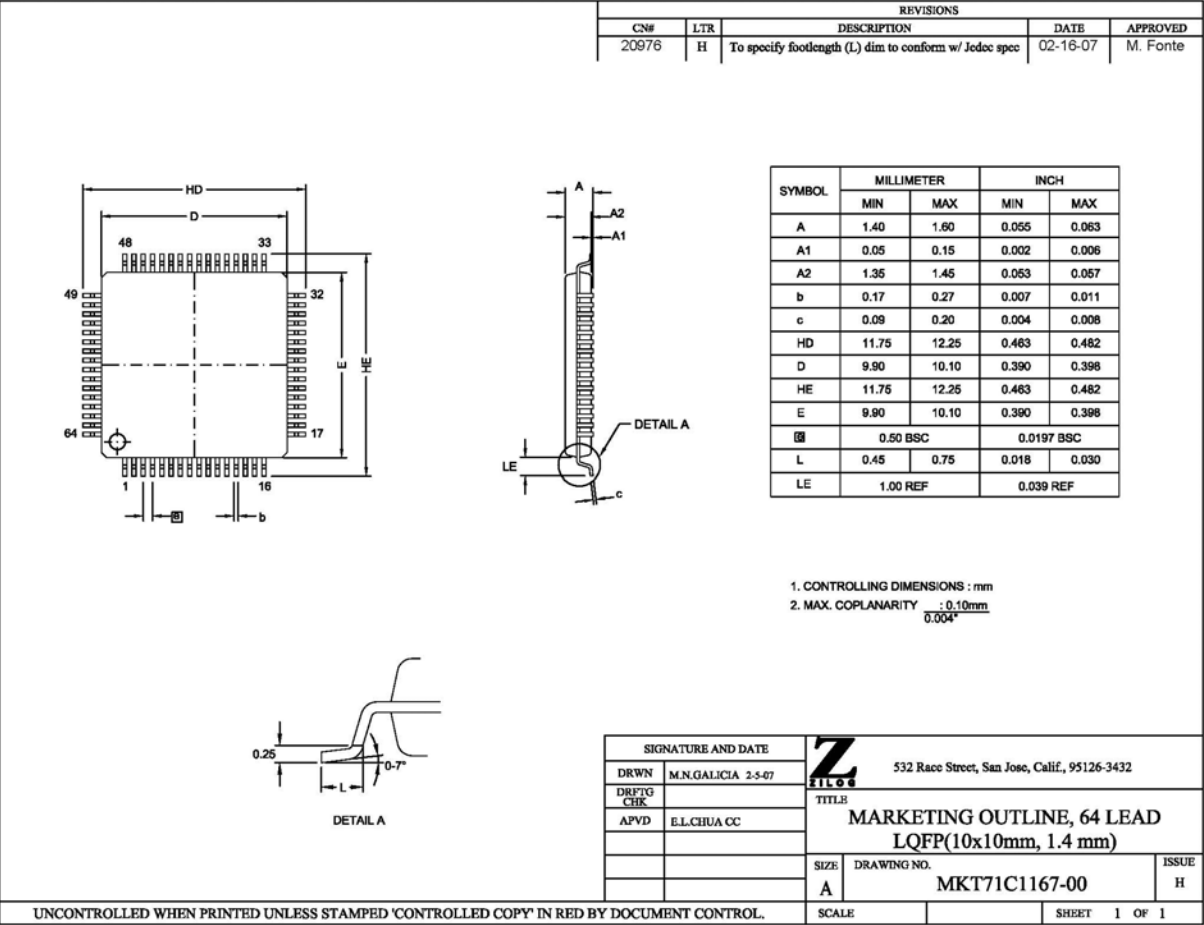
Marketing Outline, 32-Lead LQFP



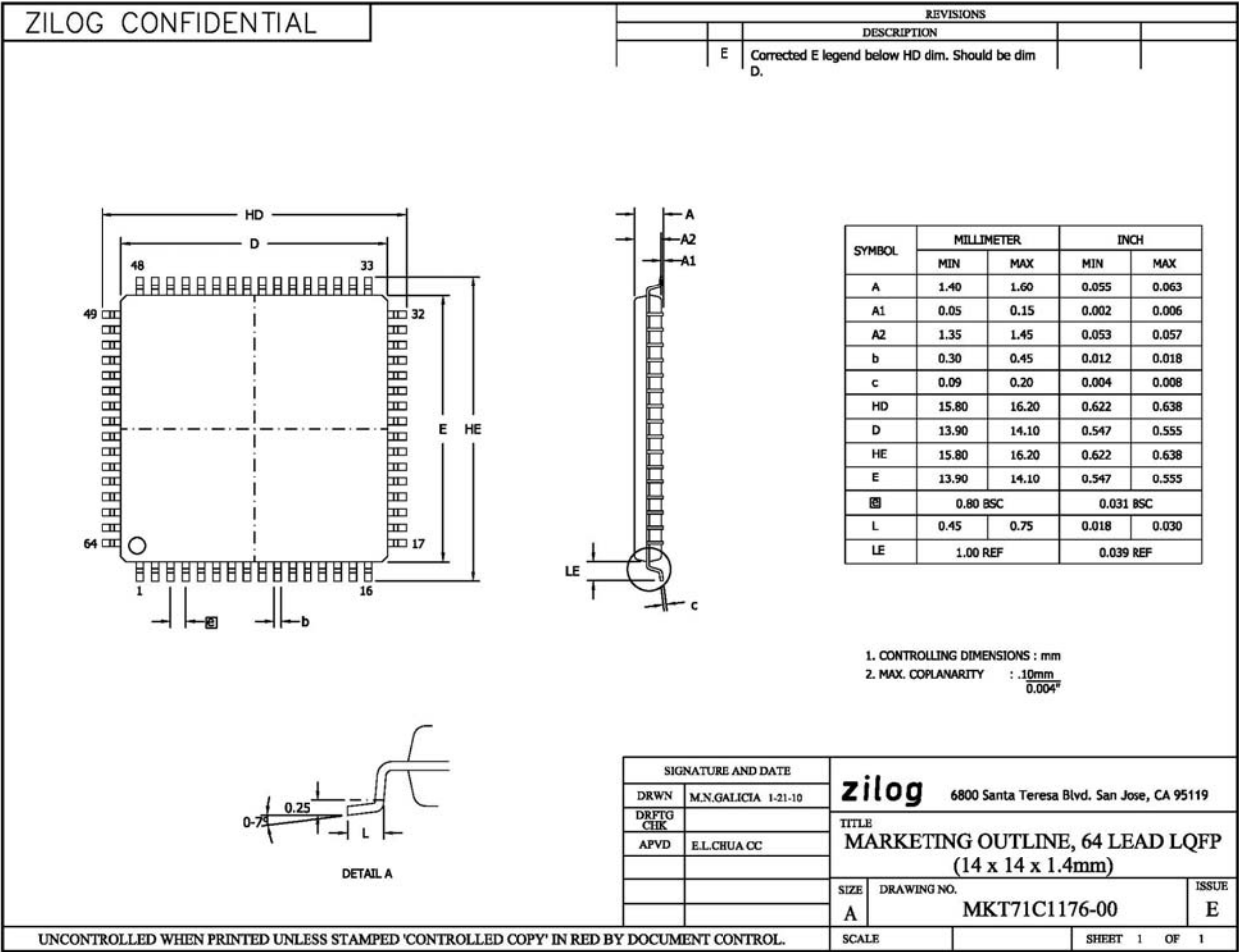
Marketing Outline, 44-Lead LQFP



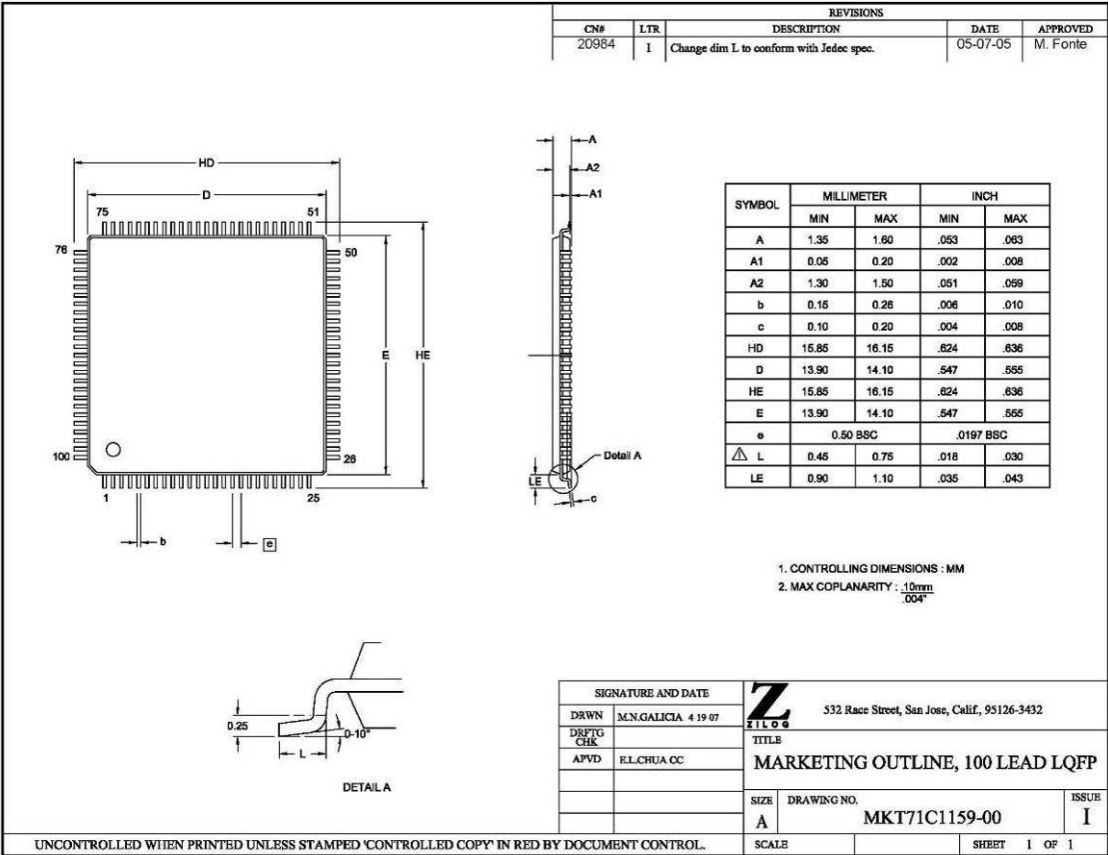
Marketing Outline, 64-Lead LQFP



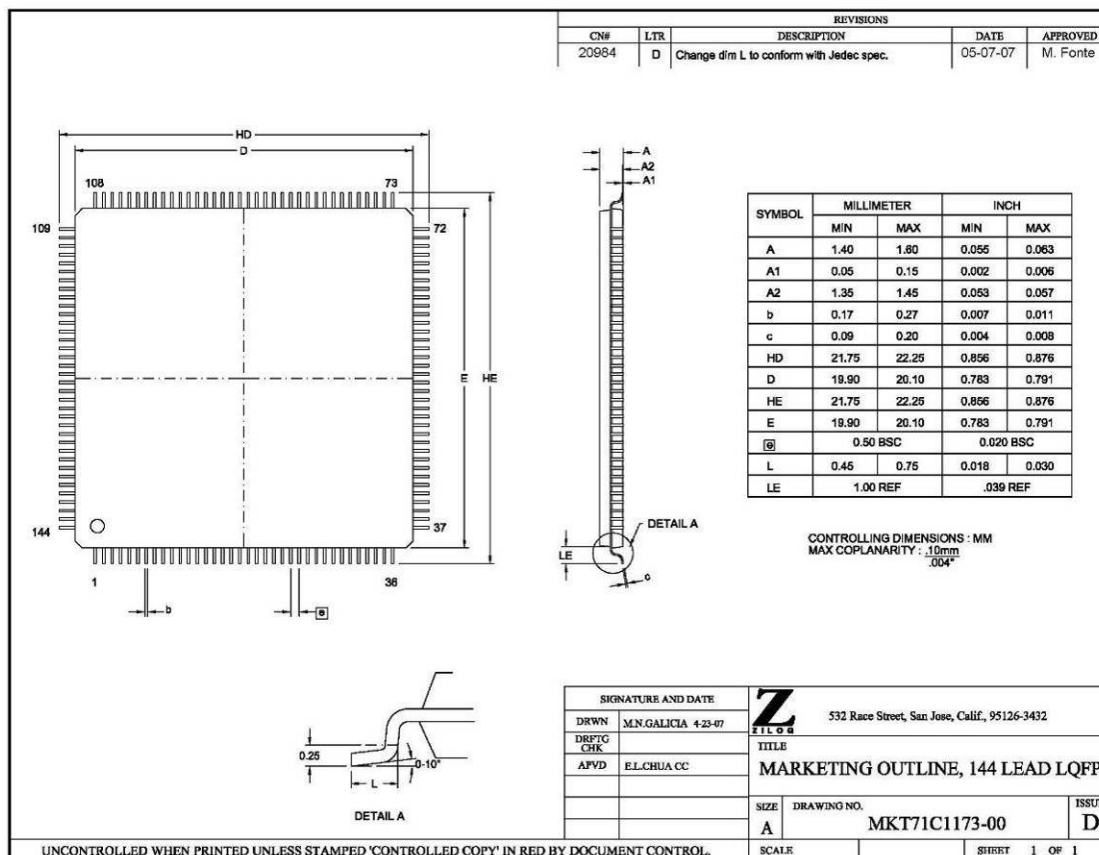
Marketing Outline, 64-Lead LQFP



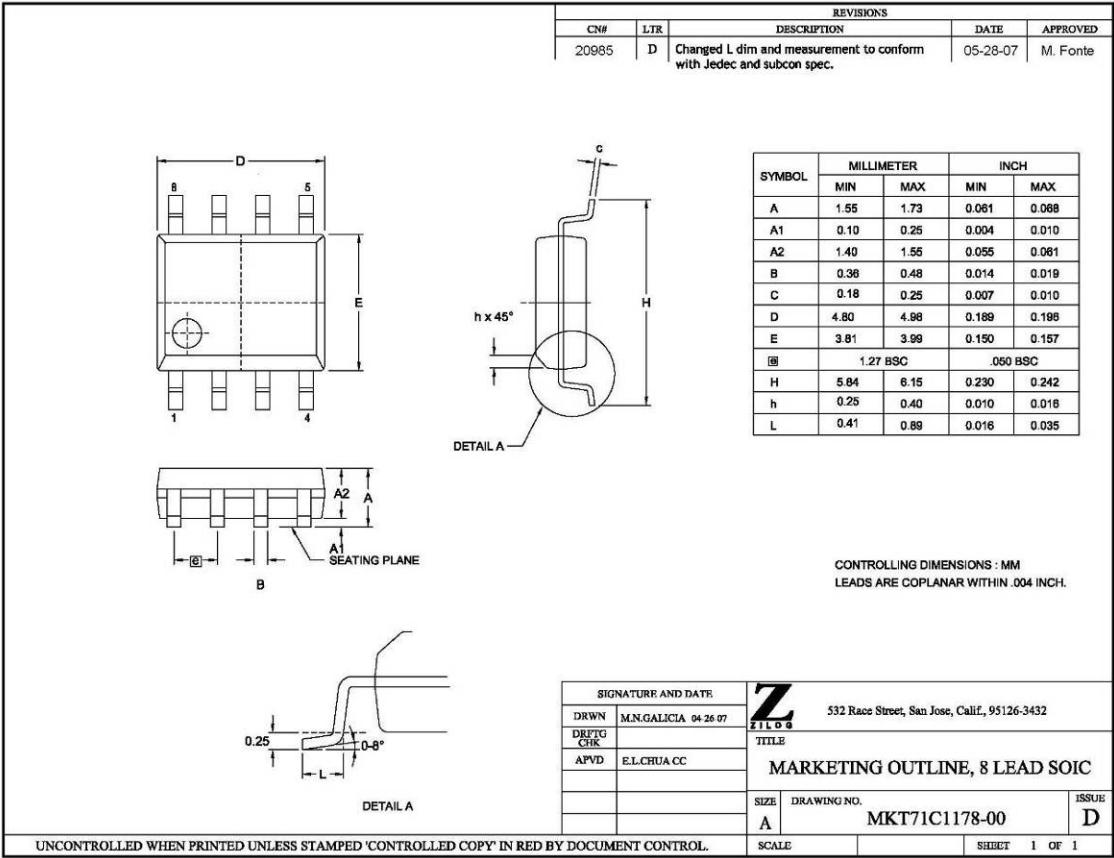
Marketing Outline, 100-Lead LQFP



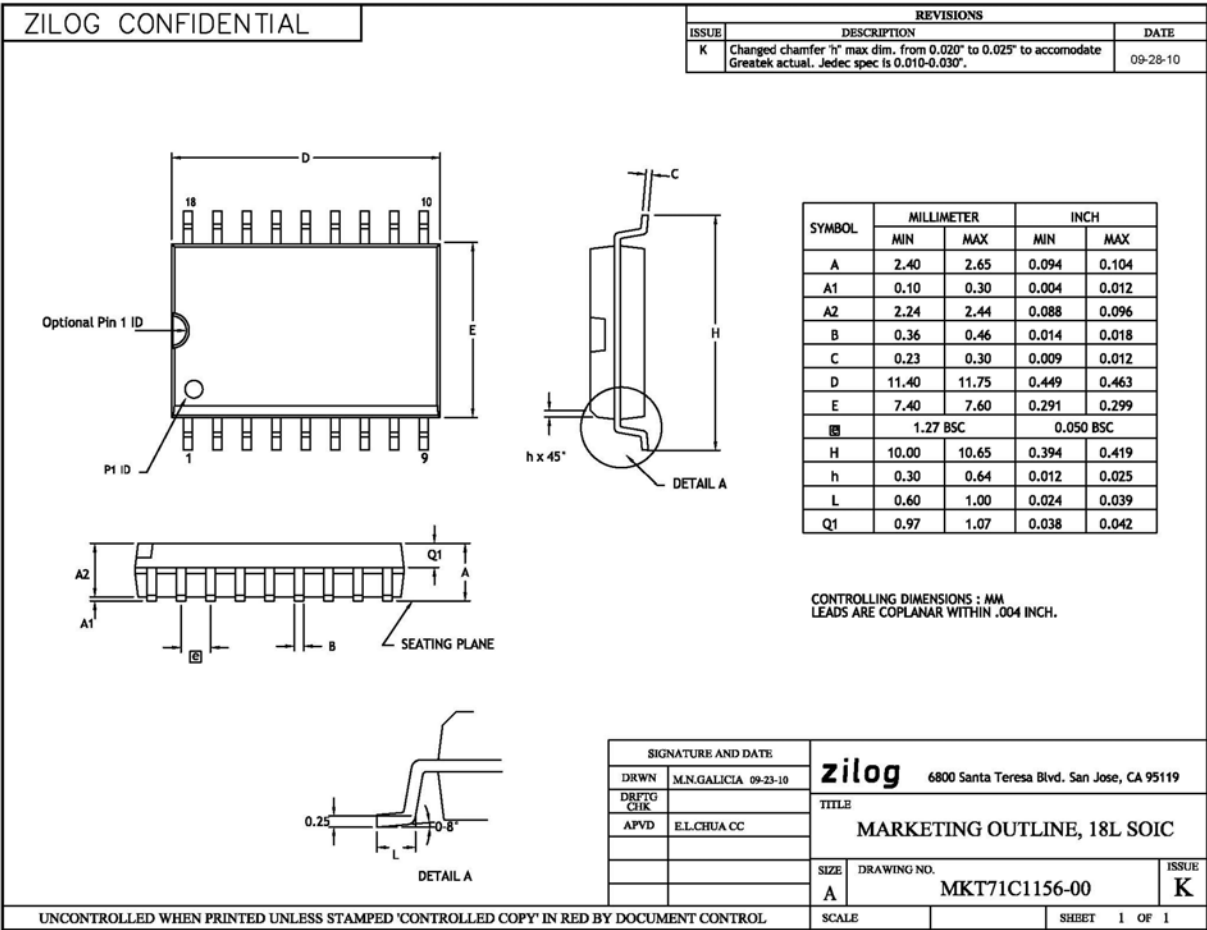
Marketing Outline, 144-Lead LQFP



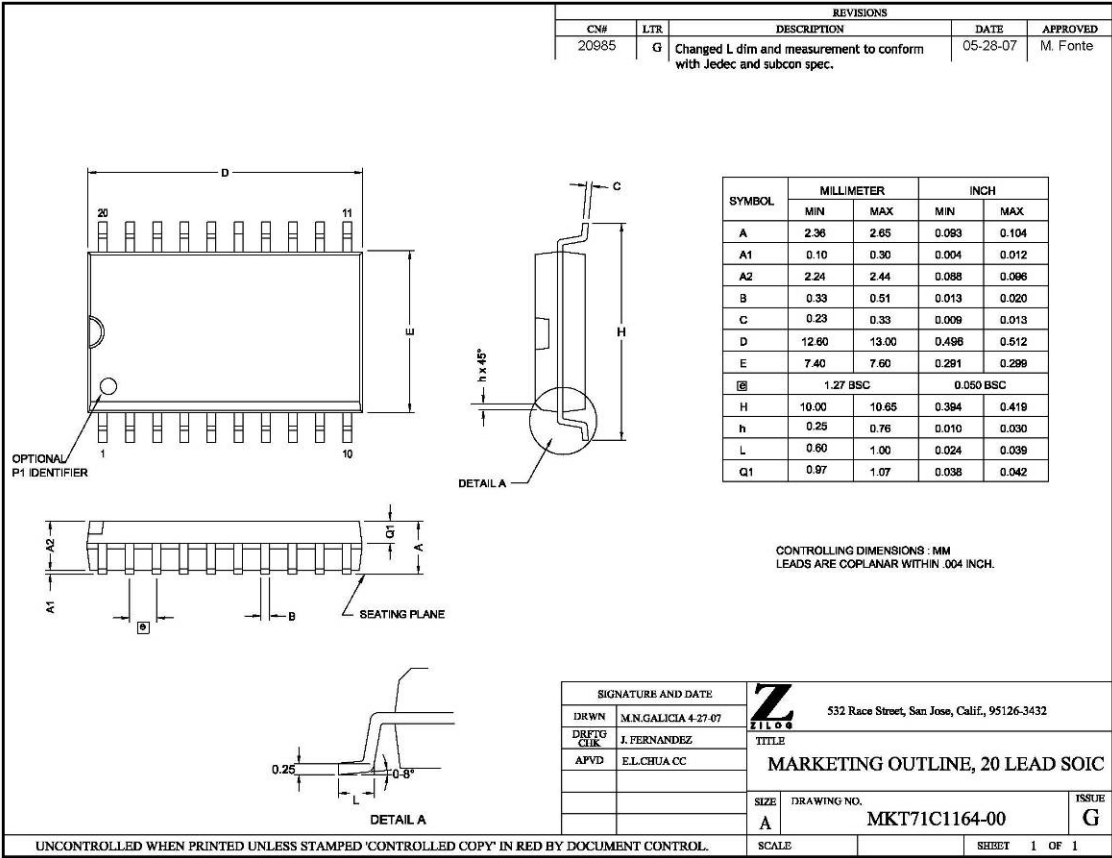
Marketing Outline, 8-Lead SOIC



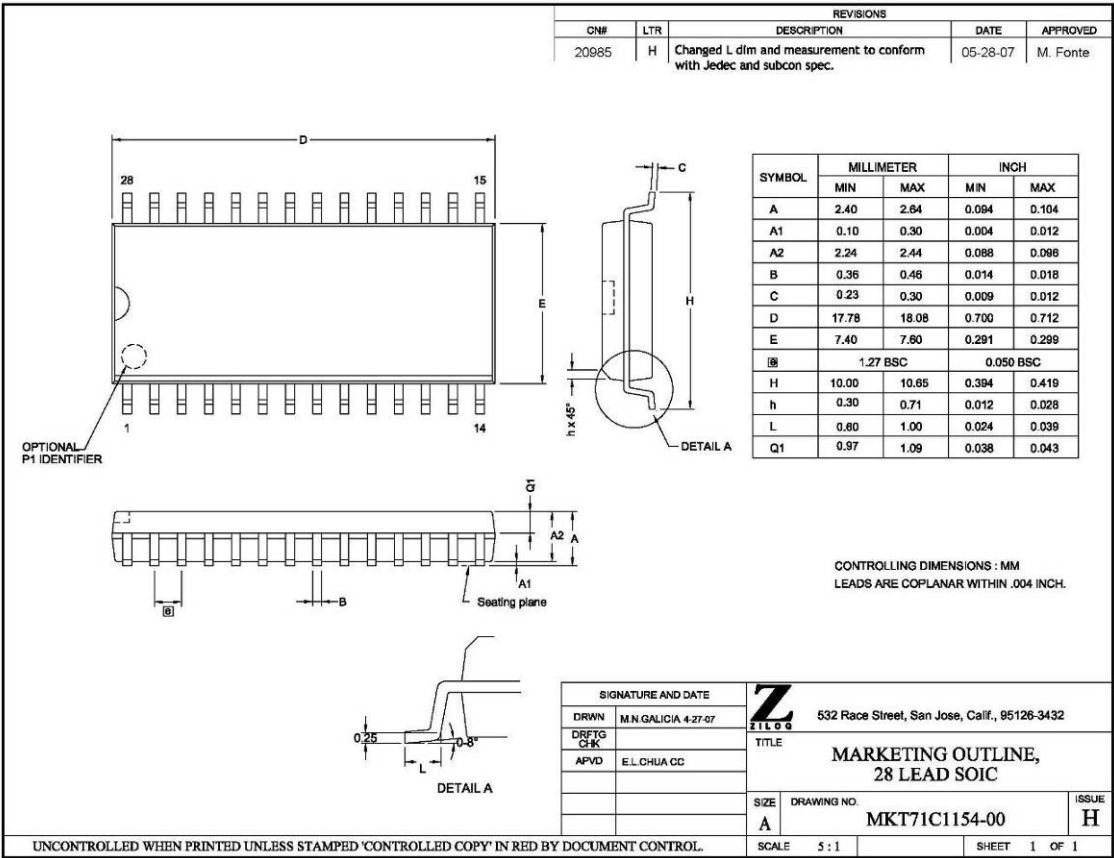
Marketing Outline, 18-Lead SOIC



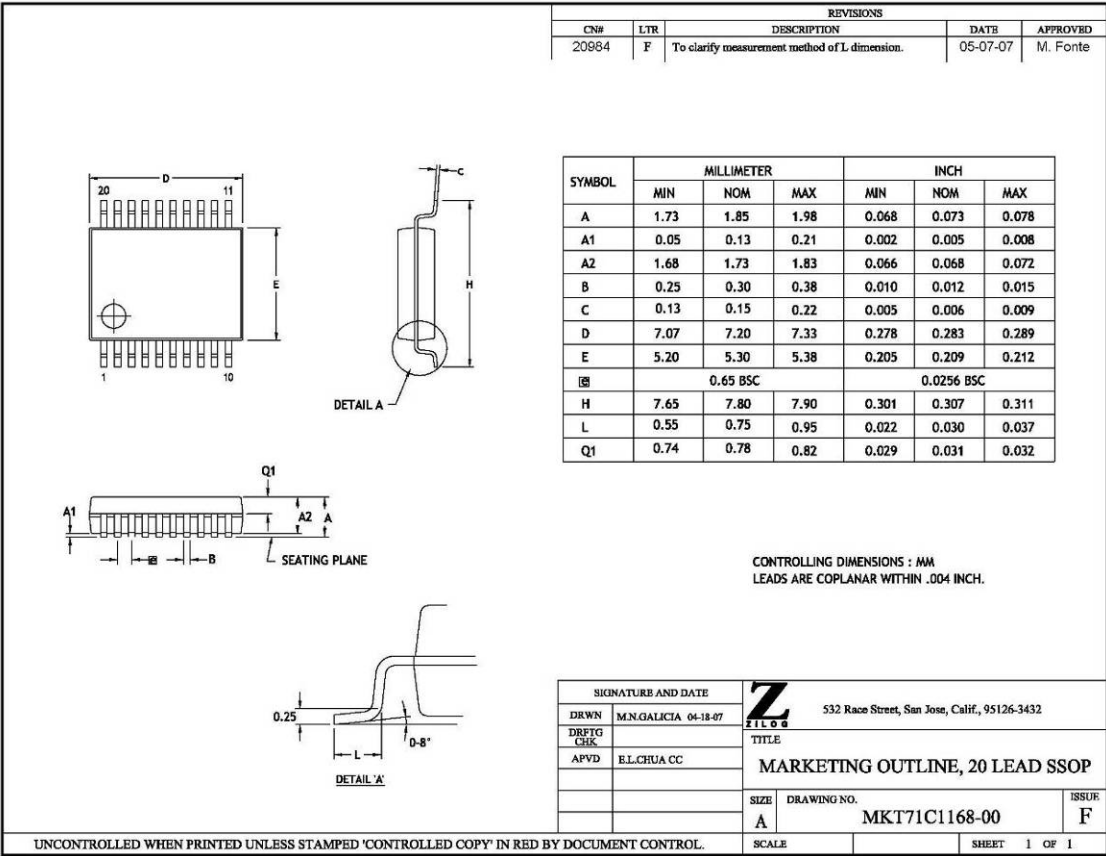
Marketing Outline, 20-Lead SOIC



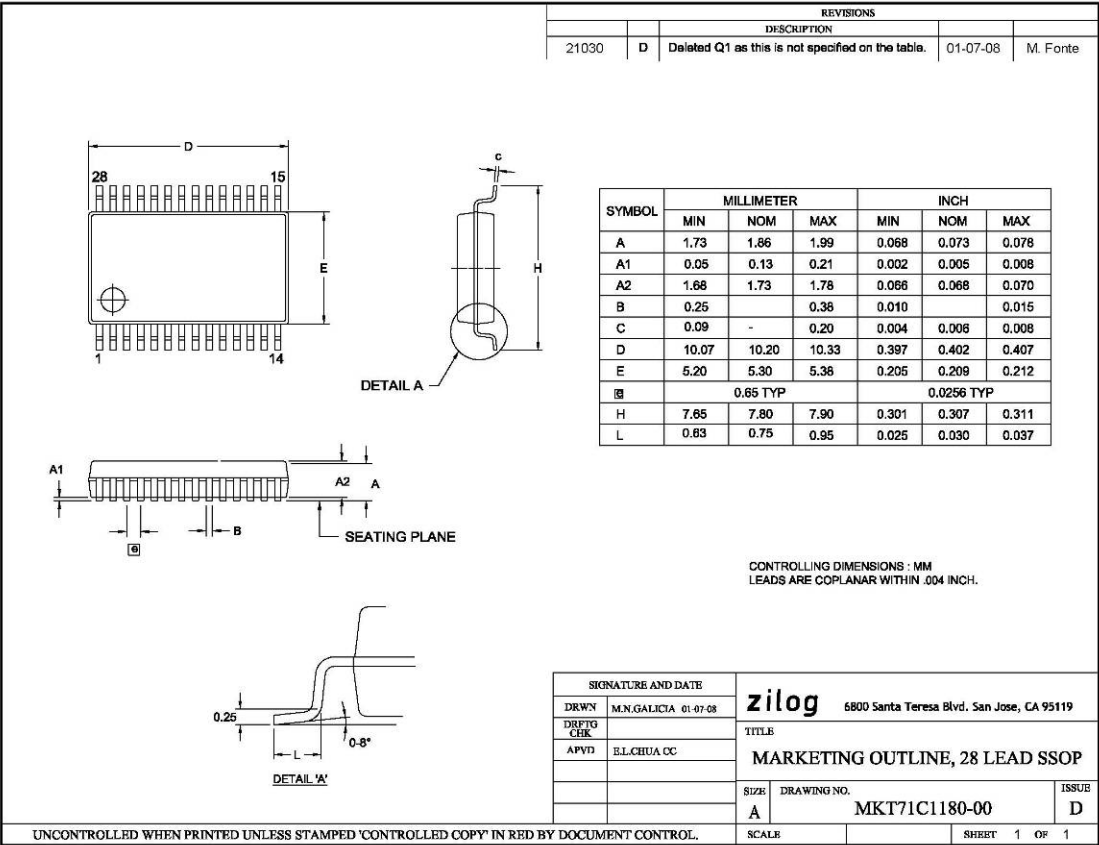
Marketing Outline, 28-Lead SOIC



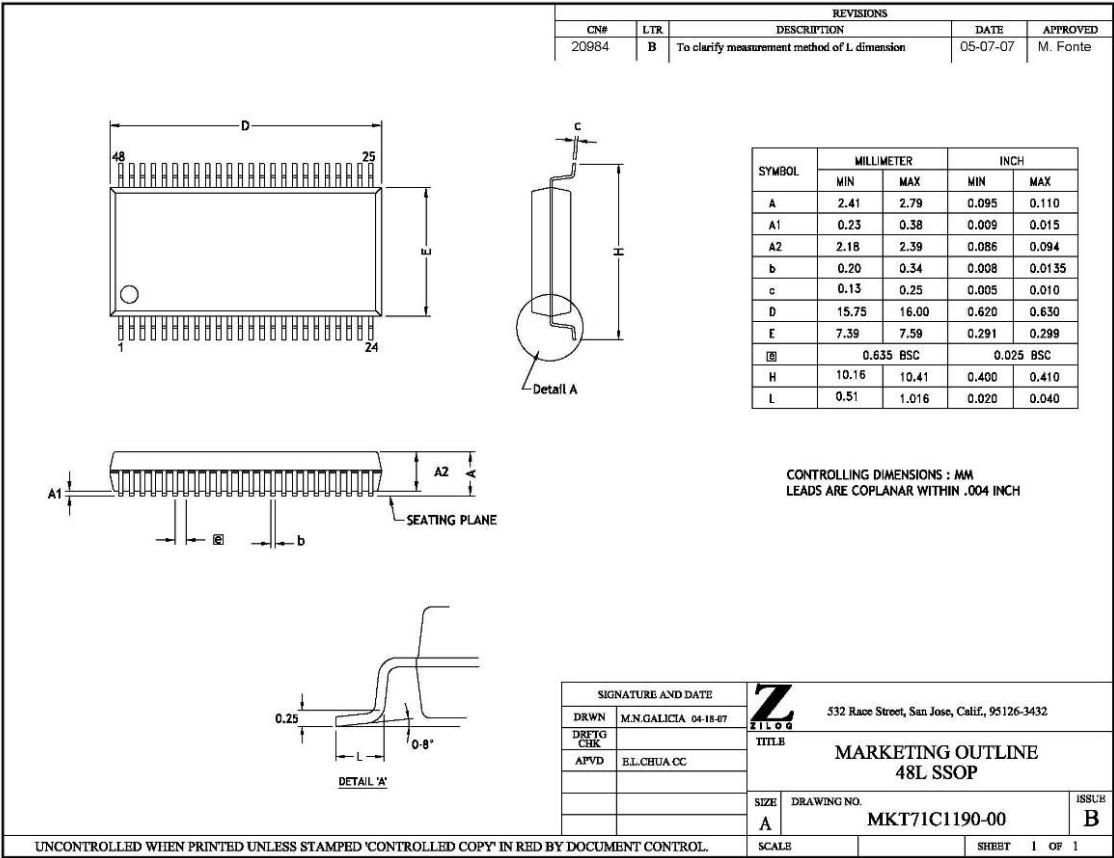
Marketing Outline, 20-Lead SSOP



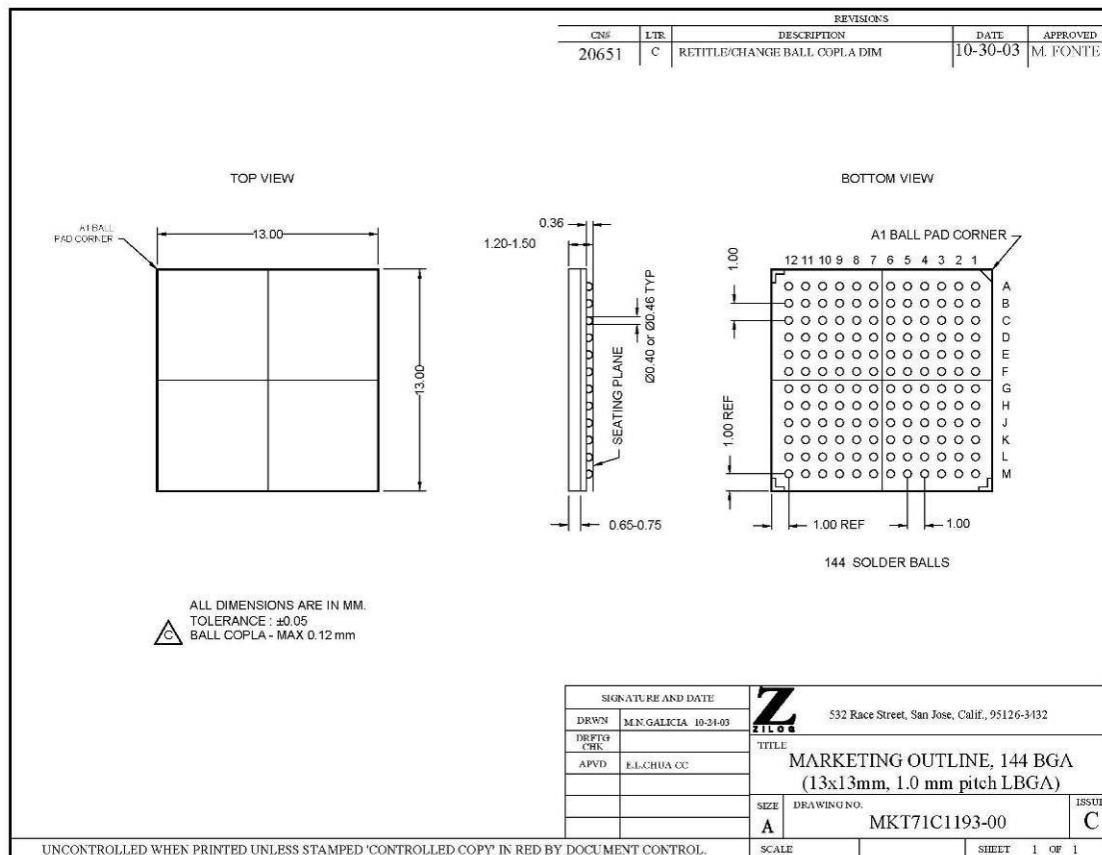
Marketing Outline, 28-Lead SSOP



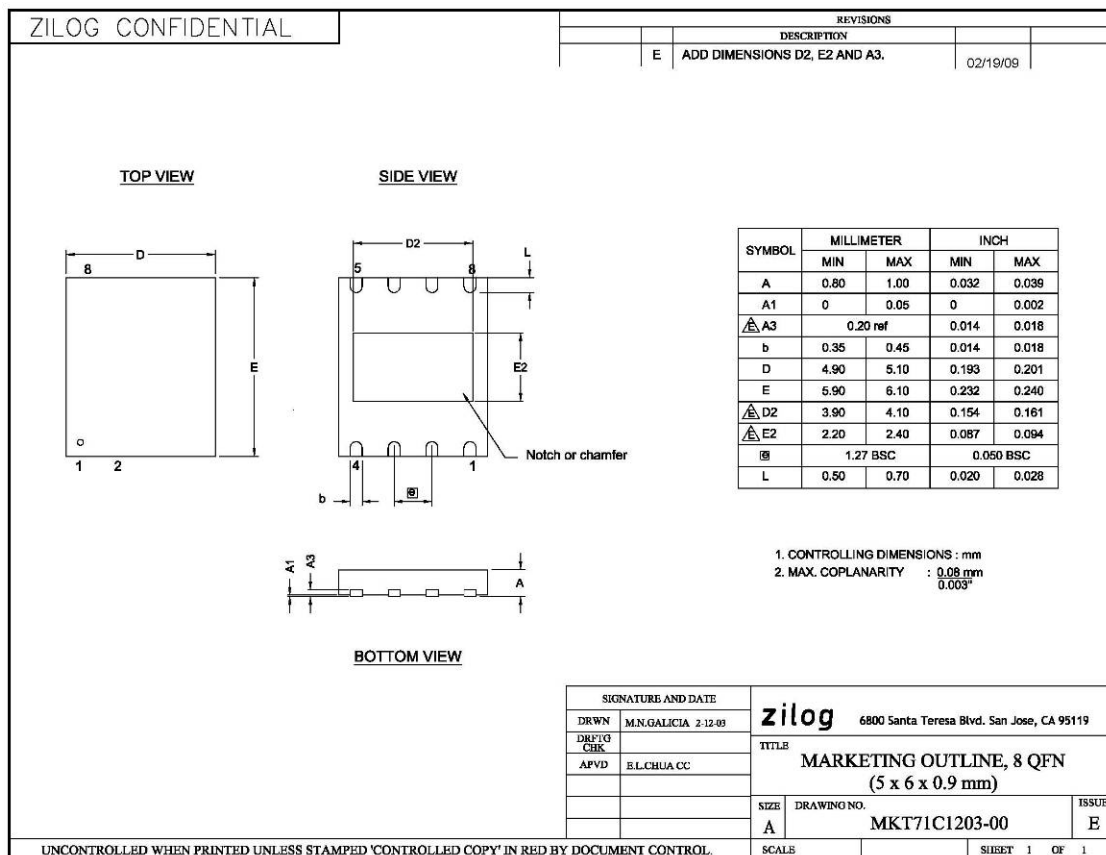
Marketing Outline, 48-Lead SSOP



Marketing Outline, 144-Lead BGA



Marketing Outline, 8-Lead QFN



Marketing Outline, 20-Lead QFN

ZILOG CONFIDENTIAL		REVISIONS			
		DESCRIPTION			
	B	ADD DIMENSIONS D2, E2 AND A3.	01/29/09		

TOP VIEW
SIDE VIEW
BOTTOM VIEW

20
1

A
A1
A3

11 15
10
6
E2
D2
L
20
b
Notch or chamfer

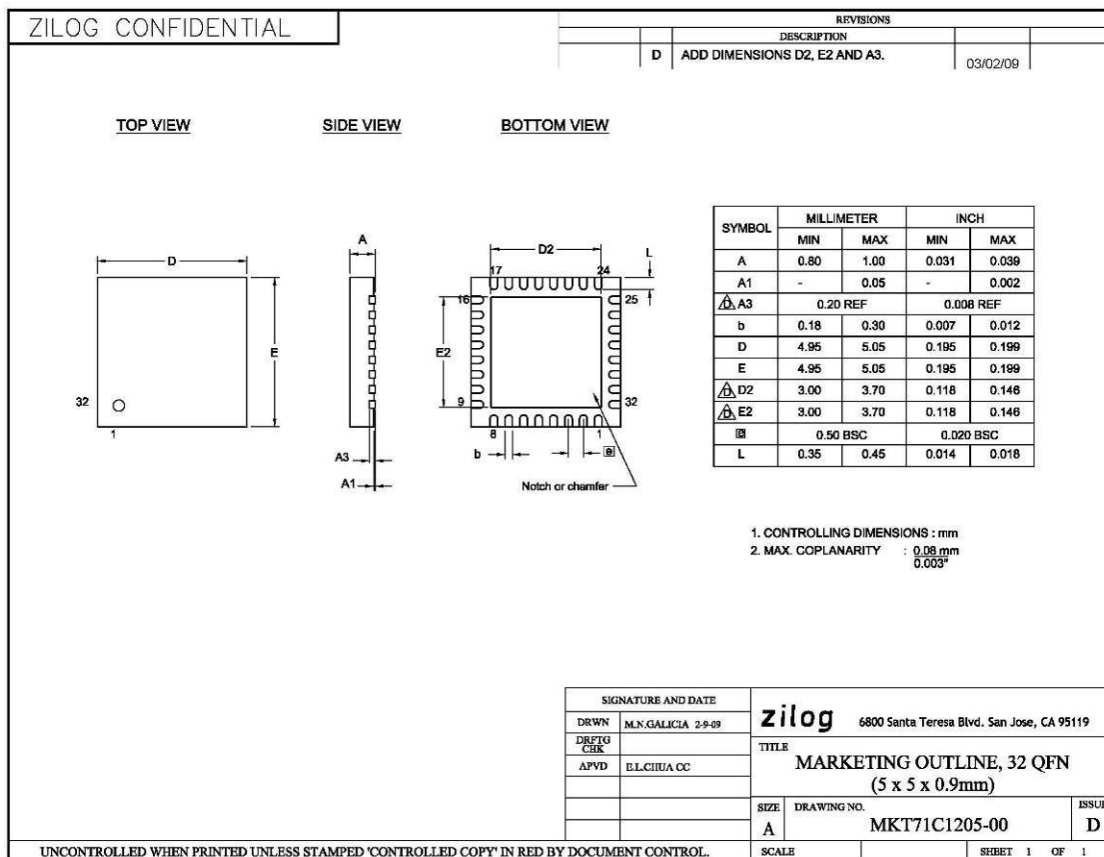
SYMBOL	MILLIMETER		INCH	
	MIN	MAX	MIN	MAX
A	0.80	1.00	0.031	0.039
A1	-	0.08	-	0.002
△ A3	0.20 REF		0.008 REF	
b	0.25	0.35	0.010	0.014
D	4.95	5.05	0.195	0.199
E	4.95	5.05	0.195	0.199
△ D2	3.15	3.35	0.124	0.132
△ E2	3.15	3.35	0.124	0.132
□	0.65 BSC		0.026 BSC	
L	0.35	0.45	0.014	0.018

1. CONTROLLING DIMENSIONS : mm
2. MAX. COPLANARITY : 0.08 mm / 0.003"

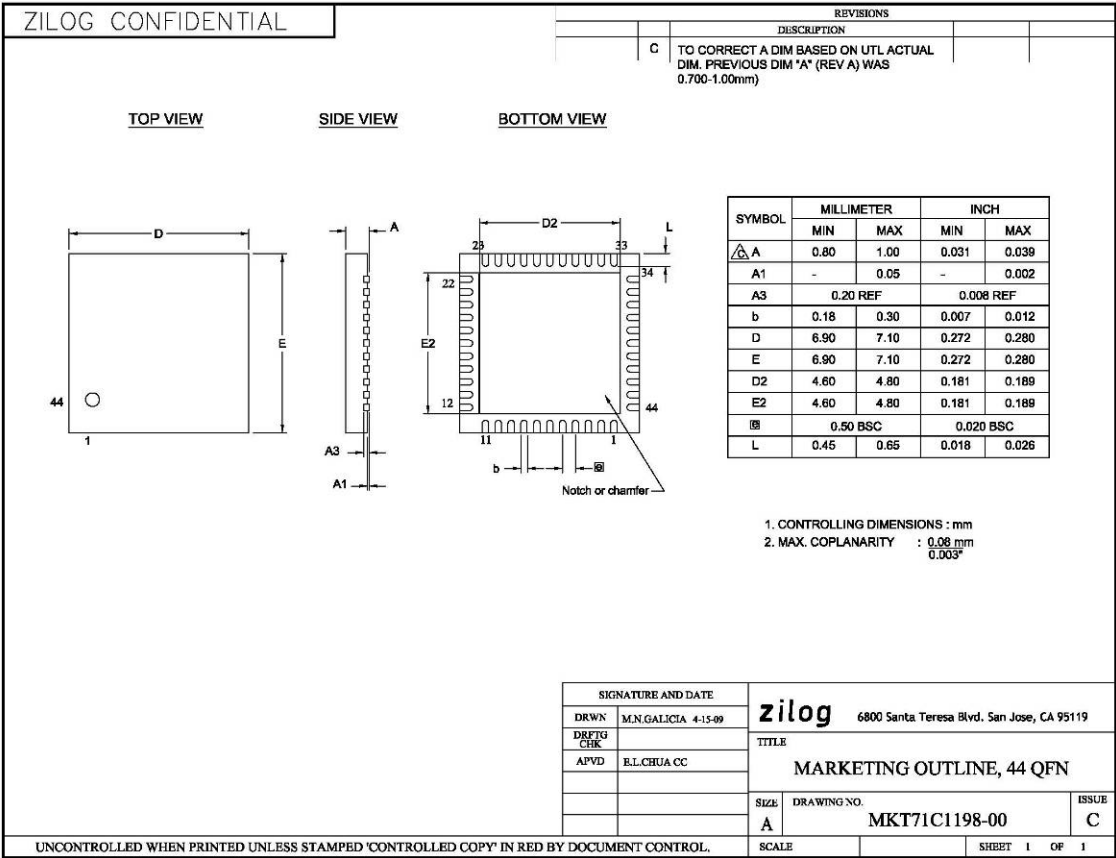
SIGNATURE AND DATE		zilog 6800 Santa Teresa Blvd. San Jose, CA 95119 MARKETING OUTLINE, 20 QFN (5 x 5 x 0.9mm)
DRAWN	M.N.GALICIA 1-03-09	
DATE	01-03-09	
APVD	E.L.CRUJAC	
SIZE A DRAWING NO. MKT71C1206-00 ISSUE B		
SCALE		SHEET 1 OF 1

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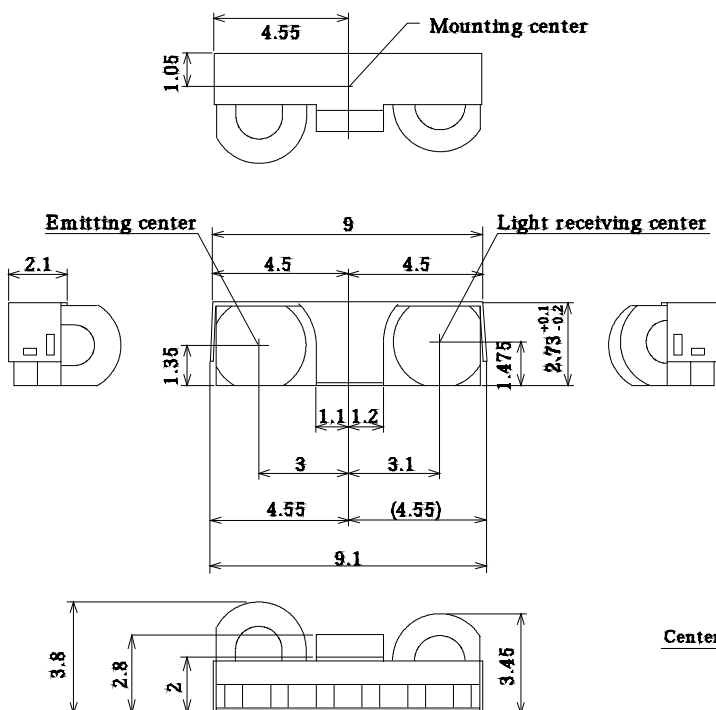
Marketing Outline, 32-Lead QFN



Marketing Outline, 44-Lead QFN



ZHX1810



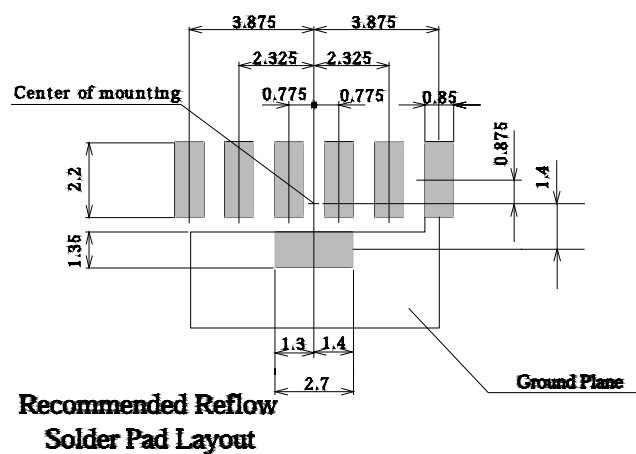
Note: The Shield tab must be soldered to the ground plane.

Devices will be marked ZHX1810.

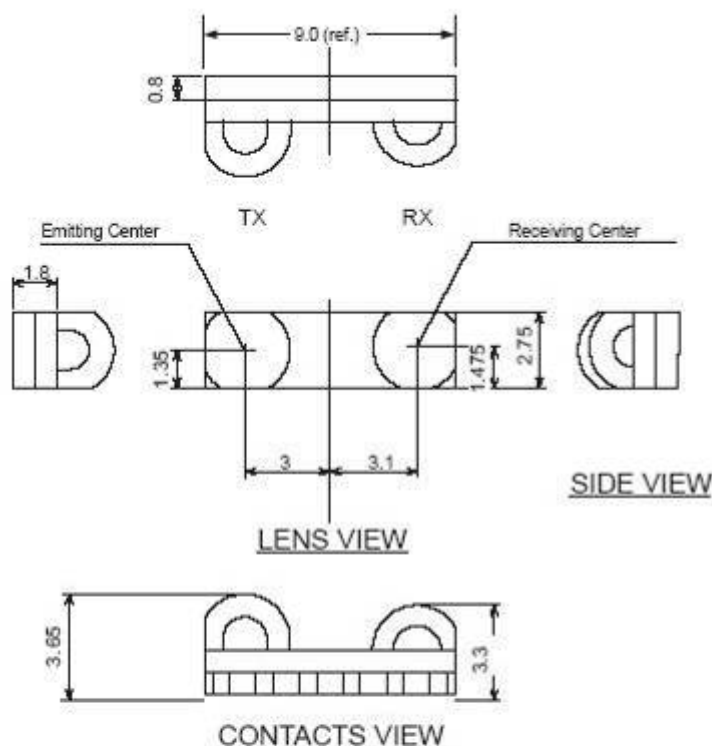
Tolerances for 0.x or 0.xx are +/- 0.25 mm

Tolerance for 0.xxx is +/- 0.13 mm

PIN	FUNCTION	PIN	FUNCTION
1	LEDA	4	SD
2	TXD	5	VCC
3	RXD	6	GND
		—	TAB

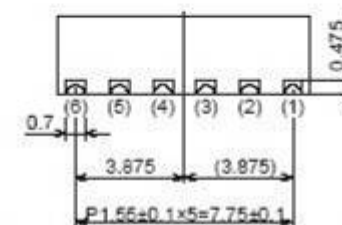


ZHX1820



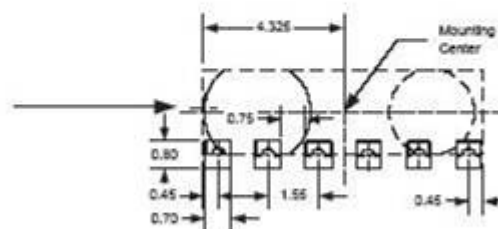
Units: mm
Tolerance: +/- 0.2

Note that this style has a larger emitter lens than receive lens



PIN	FUNCTION	PIN	FUNCTION
1	LEDA	4	SD
2	TXD	5	VCC
3	RXD	6	GND

This style does not have side solder vias



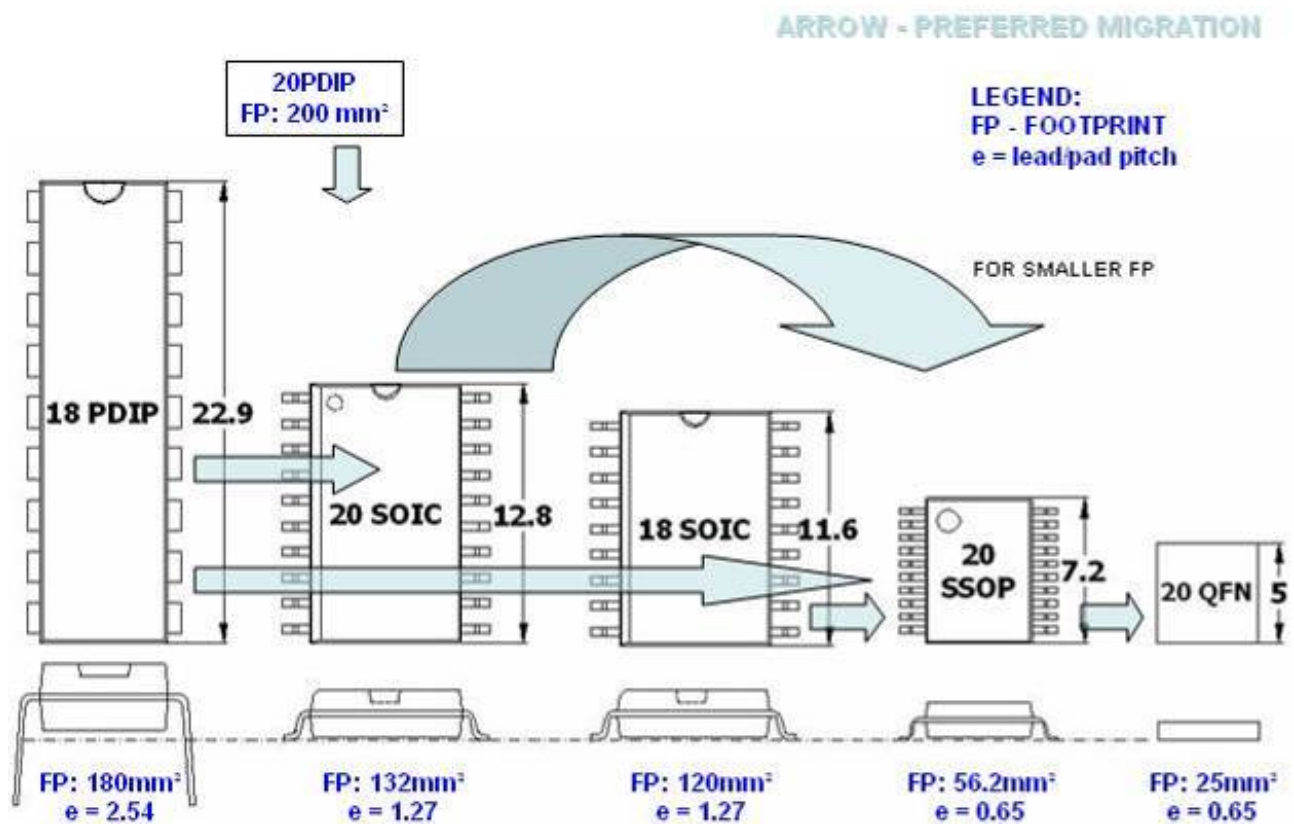
Top Look Solder Pad layout

Packing Quantity

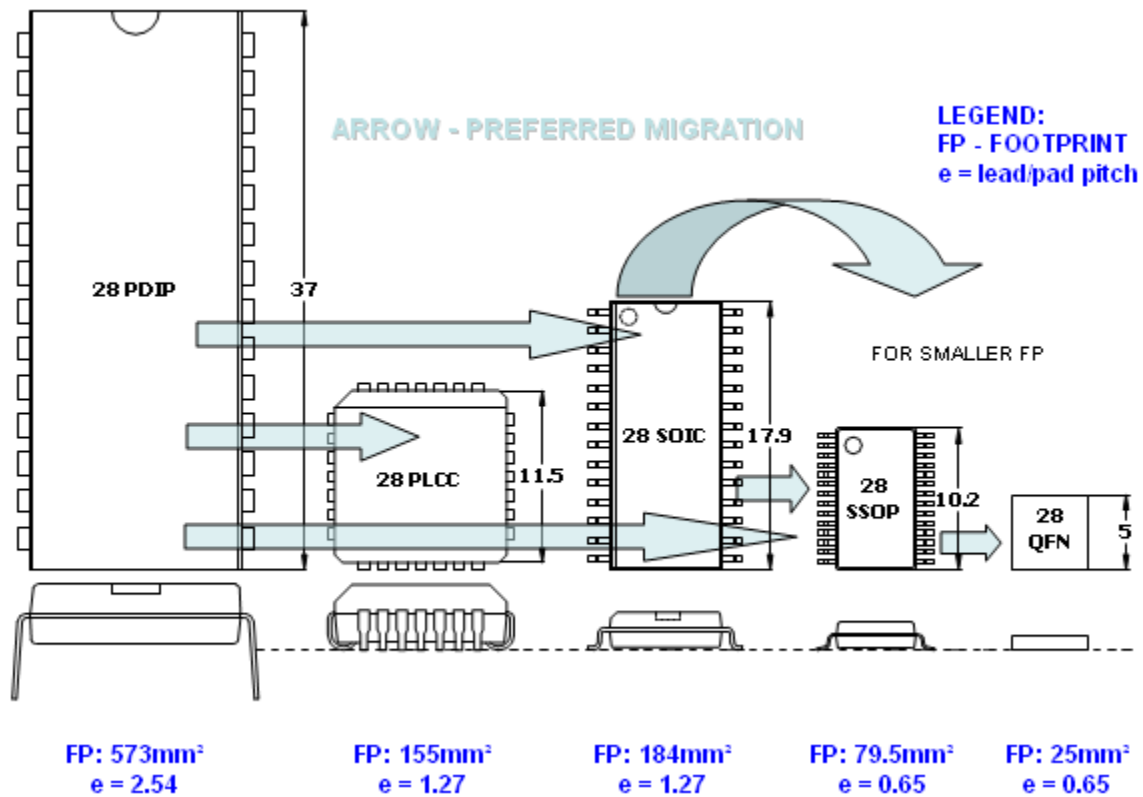
Unit Packing			
Lead Type	Quantity	Tape & Reel	Dry Pack
PDIP 8 LEAD	50/RAIL		
PDIP 18 LEAD	20/RAIL		
PDIP 20 LEAD	18/RAIL		
PDIP 28 LEAD	15/RAIL		
PDIP 40 LEAD	10/RAIL		
PDIP 48 LEAD	8/RAIL		
SDIP 64 LEAD	8/RAIL		
PLCC 28 LEAD	39/RAIL	750/REEL	936/BAG
PLCC 44 LEAD	25/RAIL	500/REEL	500/BAG
PLCC 68 LEAD	20/RAIL	250/REEL	400/BAG
PLCC 84 LEAD	15/RAIL	250/REEL	225/BAG
QFP 80L 14 x 20 x 2.7	66/TRAY	450/REEL	660/BAG
QFP 100L 14 x 20 x 2.7	66/TRAY	450/REEL	660/BAG
QFP 144L 28 x 28 x 3.42	24/TRAY		240/BAG
LQFP 32L 7x7x1.4	250/TRAY	2000/REEL	2500/BAG
LQFP 44L 10 x 10 x 1.4	160/TRAY	1500/REEL	1600/BAG
LQFP 64L 10 x 10x 1.4	160/TRAY	1500/REEL	1600/BAG
LQFP 64L 14 x 14 x 1.4	90/TRAY	1500/REEL	900/BAG
LQFP 100L 14 x 14 x1.4	90/TRAY	1500/REEL	900/BAG
LQFP 144L 20 x 20 x 1.4	60/TRAY		600/BAG
SOIC 8L 150 mil	96/RAIL	3000/REEL	
SOIC 18L 300 mil	40/RAIL	2000/REEL	
SOIC 20L 300 mil	38/RAIL	1700/REEL	
SOIC 28L 300 mil	27/RAIL	1700/REEL	
SSOP 20L 5.3 mm	67/RAIL	2000/REEL	
SSOP 28L 5.3 mm	47/RAIL	2000/REEL	
SSOP 48L	30/RAIL	1000/REEL	
144 LBGA 13 X 13	160/TRAY		1600/BAG
QFN 8L 5x6x0.9	490/TRAY		4900/BAG
QFN 20L 5x5x0.9	490/TRAY		4900/BAG
QFN 28L 5x5x0.9	490/TRAY		4900/BAG
QFN 32L 5x5x0.9	490/TRAY		4900/BAG
QFN 44L 7X7	260/TRAY	3000	2600/TRAY
IRDA			
ZHX1810		2000/REEL	
ZHX1820		2000/REEL	
For SRTR packing requirement		500/REEL	

Package Migration

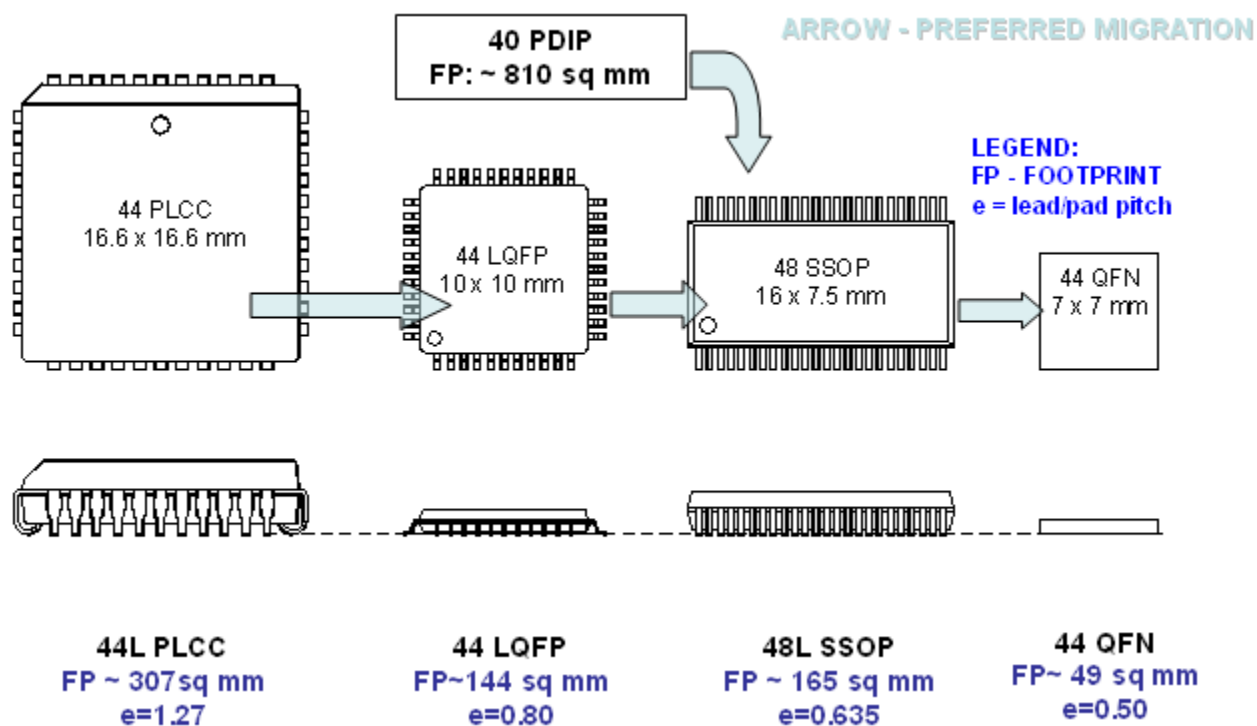
18/20-Lead PDIP Migration



28-Lead PDIP Migrations



40/44/48-Lead Migration



100/144-Lead Migration

