MPC79 MEBES Master Plate Specs:

XEROX
PALO ALTO RESEARCH CENTER
3333 Coyote Hill Road
Palo Alto, CA 94304
December 3, 1979
5

To: Micro Mask, Inc.

From: Alan Bell (494-4326), Reference: P.O. #40784

Subject: MEBES Master Plate Specifications for project: **MPC79A**

Max. Pattern Dimensions : X: 7696 μm Y: 6477 μm
Step and Repeat distances: X: 7696 μm Y: 6477 μm

# Plates per Set:	6	Defect Density:	Standard
Plate Material:	Chrome, L.E. 30	Tolerance:	+/- 0.25 μm
Plate Size:	4" x 4" x 0.60"	CD width:	(see below)
E-beam Spot Size:	0.50 μm	Oversizing:	None
Pattern Size:	3", Round	Undersizing:	None

Pattern Specifications: There are seven (7) different project dies (named B, C, D, E, F, G, H) in this mask set. All have identical dimensions (7696 x 6477 microns). See the diagram on the following pages for the placements of die types within the mask set, and for the location of the CD's. For the purposes of this description, the six master plates will have the following plate names: DIF, IMP, POL, CUT, MET, PAD. The dies will be supplied on magtape in MEBES format.

Filenames for each layer are given in the following table (file names as a function of mask level/die type):

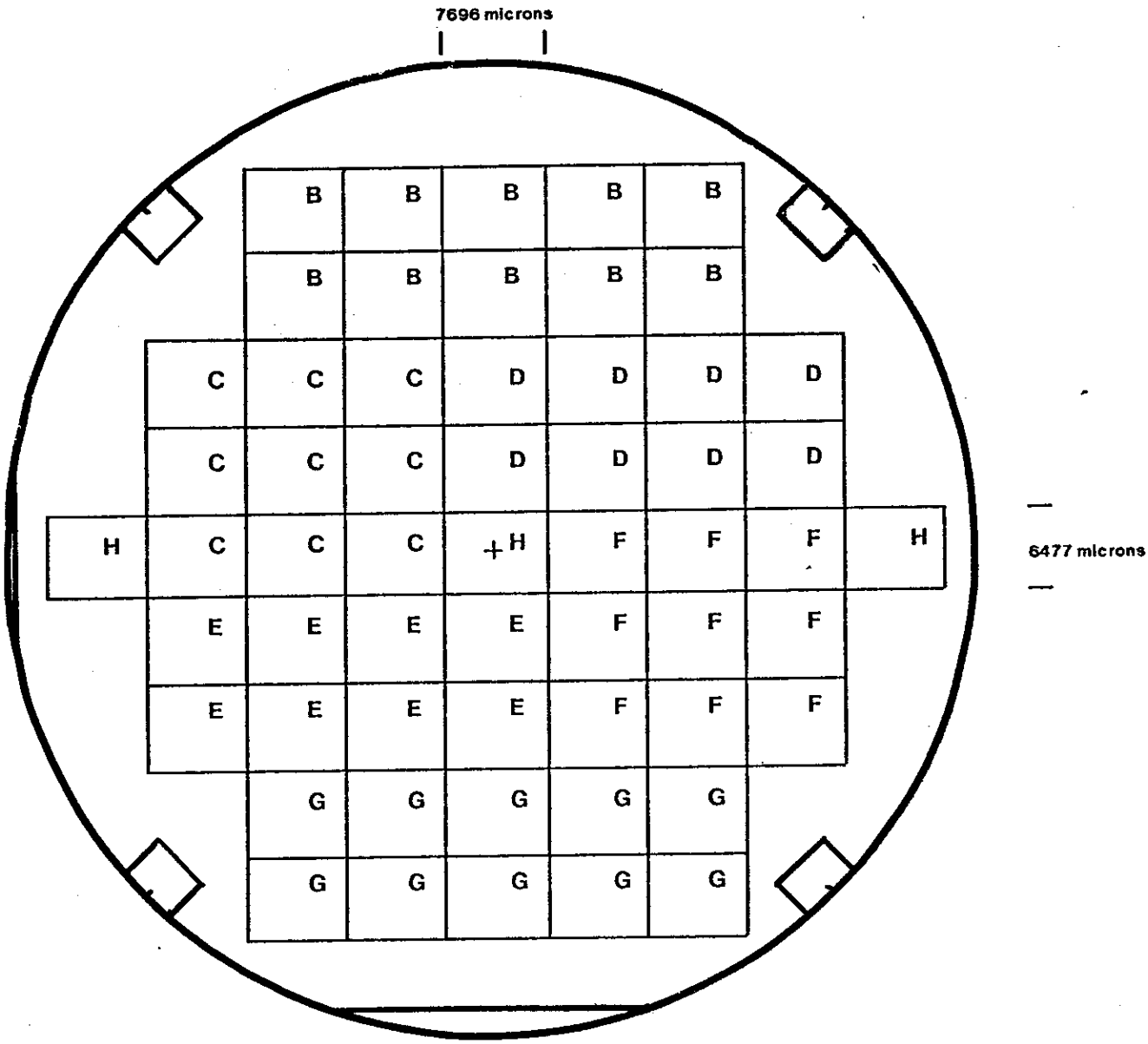
	DIF	IMP	POL	CUT	MET	PAD
Die B:	MPC79AB-10-DI	MPC79AB-20-IM	MPC79AB-30-PO	MPC79AB-40-CU	MPC79AB-50-ME	MPC79AB-60-PA
Die C:	MPC79AC-10-DI	MPC79AC-20-IM	MPC79AC-30-PO	MPC79AC-40-CU	MPC79AC-50-ME	MPC79AC-60-PA
Die D:	MPC79AD-10-DI	MPC79AD-20-IM	MPC79AD-30-PO	MPC79AD-40-CU	MPC79AD-50-ME	MPC79AD-60-PA
Die E:	MPC79AE-10-DI	MPC79AE-20-IM	MPC79AE-30-PO	MPC79AE-40-CU	MPC79AE-50-ME	MPC79AE-60-PA
Die F:	MPC79AF-10-DI	MPC79AF-20-IM	MPC79AF-30-PO	MPC79AF-40-CU	MPC79AF-50-ME	MPC79AF-60-PA
Die G:	MPC79AG-10-DI	MPC79AG-20-IM	MPC79AG-30-PO	MPC79AG-40-CU	MPC79AG-50-ME	MPC79AG-60-PA
Die H:	MPC79AH-10-DI	MPC79AH-20-IM	MPC79AH-30-PO	MPC79AH-40-CU	MPC79AH-50-ME	MPC79AH-60-PA

PLEASE adjust the patterns so that the TEXT on the mask is WRONG-READING when viewed from the CHROME SIDE.

DEVICE LABEL (to appear on each plate): **MPC79A**

FIELD POLARITIES of the plates, the MASK LABELS, and the CD widths should be as follows:

Plate Name	Plate Field	Plate Label	CD Widths (see color plate for locations)
DIF	OPAQUE	XEROX DIF A1	5.0 μm
IMP	CLEAR	XEROX IMP A2	5.0 μm
POL	OPAQUE	XEROX POL A3	5.0 μm
CUT	CLEAR	XEROX CUT A4	5.0 μm
MET	OPAQUE	XEROX MET A5	5.0 μm
PAD	CLEAR	XEROX PAD A6	5.0 μm

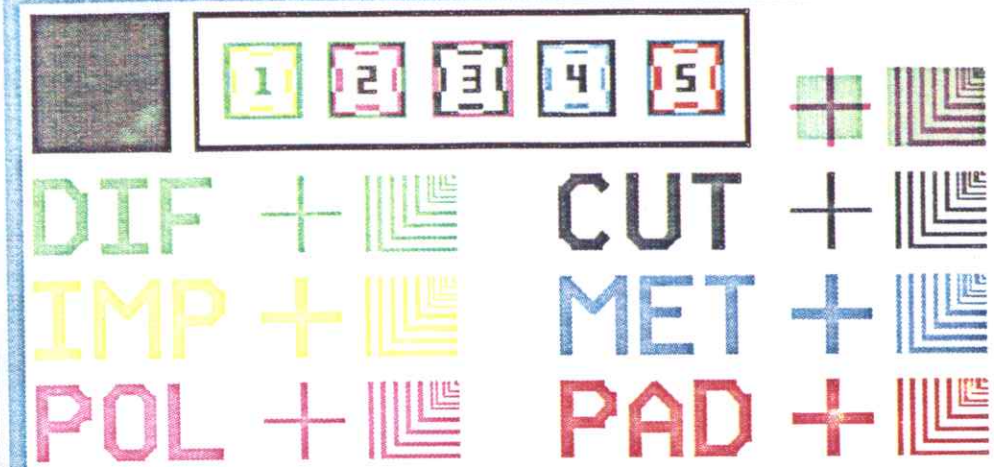


Wafer Layout Map: MPC79A

(Die size: 7696 x 6477 microns)

+ marks center of wafer

(WaferMapA.Sil)

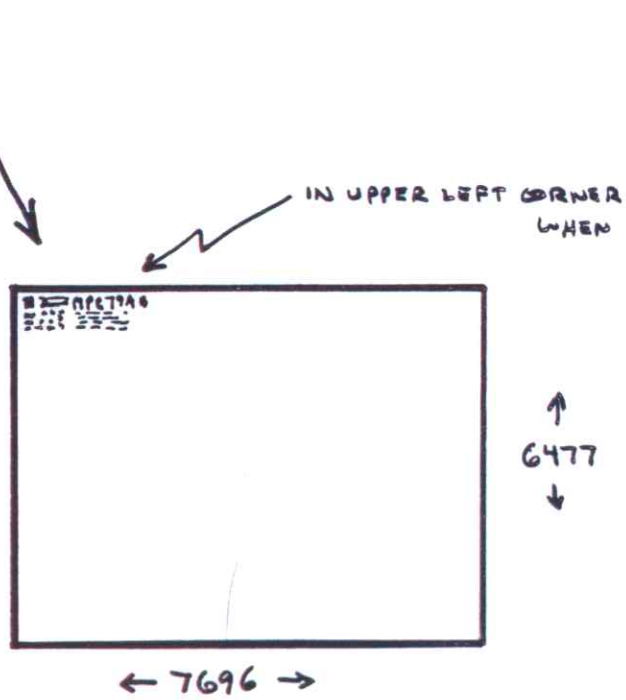


MPC79AG

1979 Multi-University Project Chip

Info Mgmt: Xerox PARC/SSL
Data Comm: ARPANET
Masks by: Micro Mask, Inc
Wafer Fab: Hewlett-Packard/ICPL

CD's:



CRITICAL DIMENSION LOCATOR MAP

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SLICE   1,13
DTITLE  A,MPC79A
MTITLE  01,DIF
MTITLE  02,IMP
MTITLE  03,POL
MTITLE  04,CUT
MTITLE  05,MET
MTITLE  06,PAD
OPTION  B,M,P01,P03,P05
CHIP    01,(A,EBCL000-01-CP)
ROWS    18415/50800
ROWS    50800/18016;83584
ROWS    83185/50800
CHIP    02,(01,MPC79AB-10-DI)
$          (02,MPC79AB-20-IM)
$          (03,MPC79AB-30-PO)
$          (04,MPC79AB-40-CU)
$          (05,MPC79AB-50-ME)
$          (06,MPC79AB-60-PA)
ROWS    70231/35408,5,7696
ROWS    76708/35408,5,7696
CHIP    03,(01,MPC79AC-10-DI)
$          (02,MPC79AC-20-IM)
$          (03,MPC79AC-30-PO)
$          (04,MPC79AC-40-CU)
$          (05,MPC79AC-50-ME)
$          (06,MPC79AC-60-PA)
ROWS    50800/27712,3,7696
ROWS    57277/27712,3,7696
ROWS    63754/27712,3,7696
CHIP    04,(01,MPC79AD-10-DI)
$          (02,MPC79AD-20-IM)
$          (03,MPC79AD-30-PO)
$          (04,MPC79AD-40-CU)
$          (05,MPC79AD-50-ME)
$          (06,MPC79AD-60-PA)
ROWS    57277/50800,4,7696
ROWS    63754/50800,4,7696
CHIP    05,(01,MPC79AE-10-DI)
$          (02,MPC79AE-20-IM)
$          (03,MPC79AE-30-PO)
$          (04,MPC79AE-40-CU)
$          (05,MPC79AE-50-ME)
$          (06,MPC79AE-60-PA)
ROWS    37846/27712,4,7696
ROWS    44323/27712,4,7696
CHIP    06,(01,MPC79AF-10-DI)
$          (02,MPC79AF-20-IM)
$          (03,MPC79AF-30-PO)
$          (04,MPC79AF-40-CU)
$          (05,MPC79AF-50-ME)
$          (06,MPC79AF-60-PA)
ROWS    37846/58496,3,7696
ROWS    44323/58496,3,7696
ROWS    50800/58496,3,7696
CHIP    07,(01,MPC79AG-10-DI)
$          (02,MPC79AG-20-IM)
$          (03,MPC79AG-30-PO)
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$          (04,MPC79AG-40-CU)
$          (05,MPC79AG-50-ME)
$          (06,MPC79AG-60-PA)
ROWS    24892/35408,5,7696
ROWS    31369/35408,5,7696
CHIP    08,(01,MPC79AH-10-DI)
$          (02,MPC79AH-20-IM)
$          (03,MPC79AH-30-PO)
$          (04,MPC79AH-40-CU)
$          (05,MPC79AH-50-ME)
$          (06,MPC79AH-60-PA)
ROWS    50800/20016;50800;81584
CHIP    09,(A,EBCL000-02-CP)
ROWS    18415/50800
ROWS    50800/18016;83584
ROWS    83185/50800
END
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To: Micro Mask, Inc.

From: Alan Bell (494-4326), Reference: P.O. #40784

Subject: MEBES Master Plate Specifications for project: **MPC79B**

Max. Pattern Dimensions : X: 7696 μm Y: 6477 μm
Step and Repeat distances: X: 7696 μm Y: 6477 μm

# Plates per Set:	6	Defect Density:	Standard
Plate Material:	Chrome, L.E. 30	Tolerance:	+/- 0.25 μm
Plate Size:	4" x 4" x 0.60"	CD width:	(see below)
E-beam Spot Size:	0.50 μm	Oversizing:	None
Pattern Size:	3", Round	Undersizing:	None

Pattern Specifications: There are seven (7) different project dies (named I, J, K, L, M, N, O) in this mask set. All have identical dimensions (7696 x 6477 microns). See the diagram on the following pages for the placements of die types within the mask set, and for the location of the CD's. For the purposes of this description, the six master plates will have the following plate names: DIF, IMP, POL, CUT, MET, PAD. The dies will be supplied on magtape in MEBES format.

Filenames for each layer are given in the following table (file names as a function of mask level/die type):

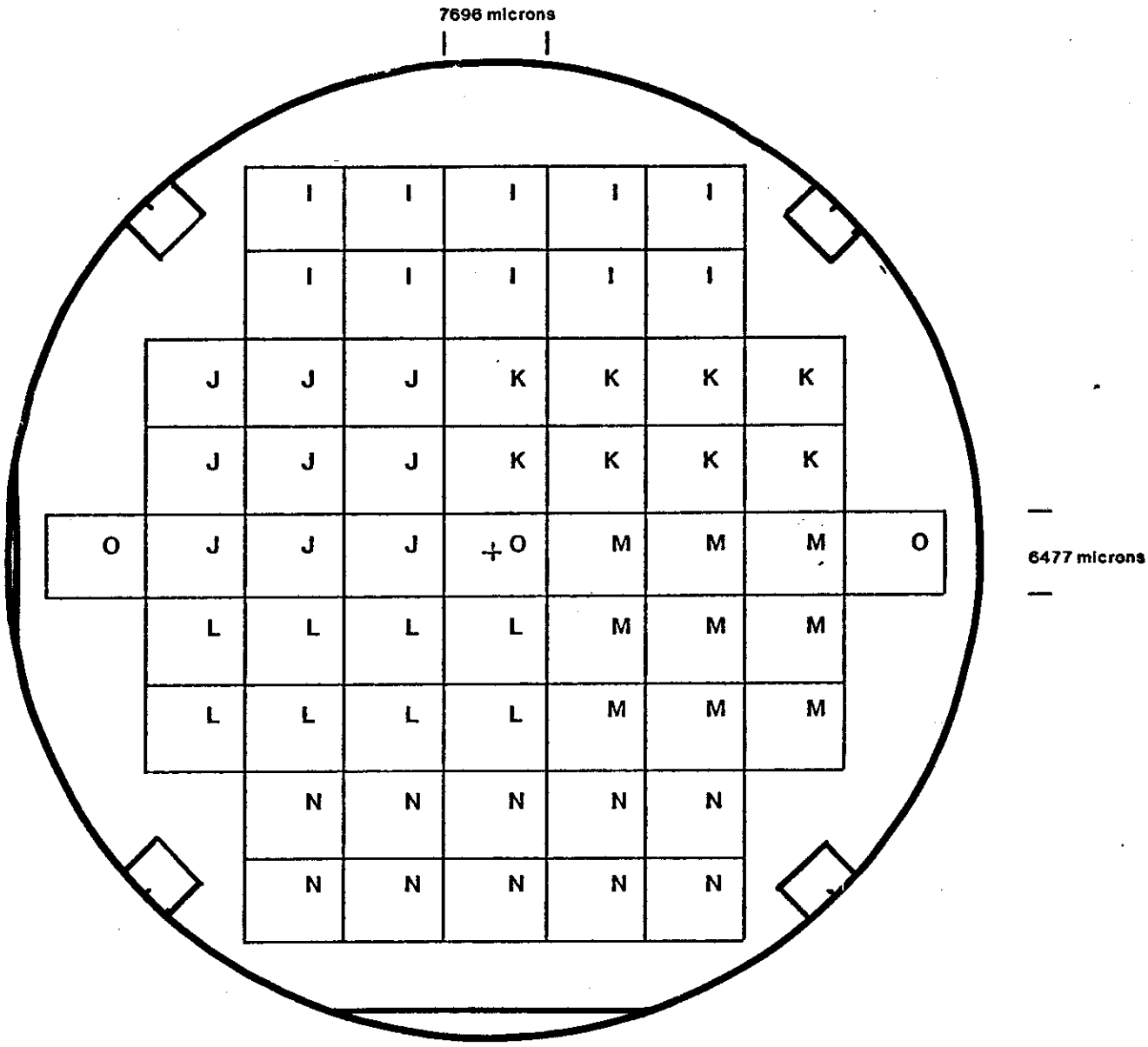
	DIF	IMP	POL	CUT	MET	PAD
Die I:	MPC79BI-10-DI	MPC79BI-20-IM	MPC79BI-30-PO	MPC79BI-40-CU	MPC79BI-50-ME	MPC79BI-60-PA
Die J:	MPC79BJ-10-DI	MPC79BJ-20-IM	MPC79BJ-30-PO	MPC79BJ-40-CU	MPC79BJ-50-ME	MPC79BJ-60-PA
Die K:	MPC79BK-10-DI	MPC79BK-20-IM	MPC79BK-30-PO	MPC79BK-40-CU	MPC79BK-50-ME	MPC79BK-60-PA
Die L:	MPC79BL-10-DI	MPC79BL-20-IM	MPC79BL-30-PO	MPC79BL-40-CU	MPC79BL-50-ME	MPC79BL-60-PA
Die M:	MPC79BM-10-DI	MPC79BM-20-IM	MPC79BM-30-PO	MPC79BM-40-CU	MPC79BM-50-ME	MPC79BM-60-PA
Die N:	MPC79BN-10-DI	MPC79BN-20-IM	MPC79BN-30-PO	MPC79BN-40-CU	MPC79BN-50-ME	MPC79BN-60-PA
Die O:	MPC79BO-10-DI	MPC79BO-20-IM	MPC79BO-30-PO	MPC79BO-40-CU	MPC79BO-50-ME	MPC79BO-60-PA

PLEASE adjust the patterns so that the TEXT on the mask is WRONG-READING when viewed from the CHROME SIDE.

DEVICE LABEL (to appear on each plate): **MPC79B**

FIELD POLARITIES of the plates, the MASK LABELS, and the CD width should be as follows:

Plate Name	Plate Field	Plate Label	CD Widths (see color plate for locations)
DIF	OPAQUE	XEROX DIF B1	5.0 μm
IMP	CLEAR	XEROX IMP B2	5.0 μm
POL	OPAQUE	XEROX POL B3	5.0 μm
CUT	CLEAR	XEROX CUT B4	5.0 μm
MET	OPAQUE	XEROX MET B5	5.0 μm
PAD	CLEAR	XEROX PAD B6	5.0 μm

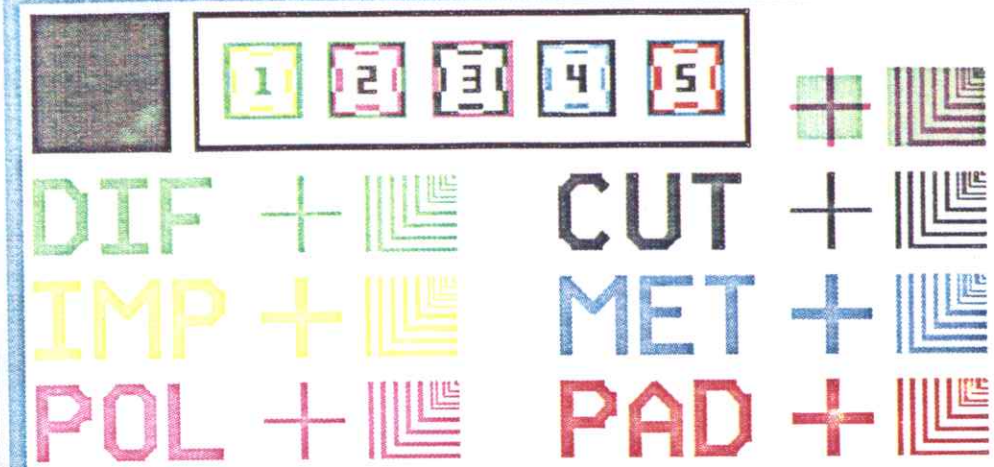


Wafer Layout Map: MPC79B

(Die size: 7696 x 6477 microns)

+ marks center of wafer

(WaferMapB.sil)



MPC79AG

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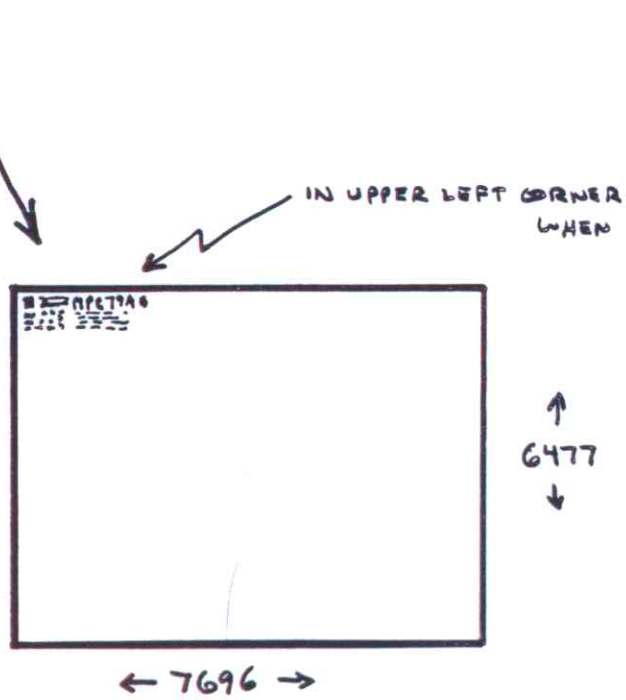
Data Comm: ARPANET
Masks by: Micro Mask, Inc
Wafer Fab: Hewlett-Packard/ICPL

CD's:



CRITICAL DIMENSION LOCATOR MAP