





Integrated Device Technology, Inc.  
2975 Stender Way, Santa Clara, CA - 95054

## PRODUCT/PROCESS CHANGE NOTICE (PCN)

### ATTACHMENT - PCN #: G-0203-05

- PCN Type:** To qualify new mold compound from Sumitomo EME-6600H.
- Data Sheet Change:** No
- Detail Of Change:** This change will be implemented on all applicable plastic package (except BGA) families.

Description	From	To
Mold Compound	Sumitomo 6300 Series	Sumitomo EME-6600H

#### Conversion schedule (Estimated):

Please contact your local field sales representative for sample availability and production shipments.



Integrated Device Technology, Inc.  
2975 Stender Way, Santa Clara, CA - 95054

## PRODUCT/PROCESS CHANGE NOTICE (PCN)

### ATTACHMENT - PCN #: G-0203-05

**Qualification Plan:** Following reliability tests will be performed per package family and the expected completion date is June 28, 2002. Qualification data is available upon request.

	Test Methods	Sample size /# Fails
Highly Accelerated Stress Test (HAST) (100 Hrs, @ 130°C/85%RH,Static Bias)	EIA/JESD22-A110	45/0
Temperature Cycling, (-65°C to +150°C, 500 cyc)	MIL-STD-883, Method 1010	45/0
Life Test, (+125°C, 1000 hrs)	MIL-STD-883, Method 1005	77/0
Hi Temp Bake, (+150°C, 1000 hrs)	MIL-STD-883, Method 1008	77/0
Auto Clave (SPP), (168Hrs, @ 2ATM, 121°C)	EIA/JESD22-A102	45/0
Package Moisture Characterization (Note 1)	JEDEC J-STD-20	22/0
Internal Visual Inspection	MIL-STD-883, Method 2010	5/0
External Visual Inspection	MIL-STD-883, Method 2009	25/0
S.A.T.	JEDEC J-STD-035	10/0
X-ray Examination	Per IDT specification	45/0
Bond Pull Test	MIL-STD-883, Method 2011	5/0
Solderability Test	MIL-STD-883, Method 2003	5/0
Bake & Ball Shear Test	EIA/JESD22-B116	5/0
Physical Dimension	MIL-STD-883, Method 2016	5/0
Lead Integrity Test	MIL-STD-883, Method 2004	3/0
Resistance to Solvents	MIL-STD-883, Method 2015	3/0

Note 1: Moisture Characterization will confirm that there is no change to the Moisture Sensitivity Level.

# SUMITOMO BAKELITE SUMIKON<sup>®</sup>

EME-6600H

DCPD RESIN BASE  
VERY LOW STRESS  
NON/SHORT PMC  
HIGH RELIABILITY

## EME-6600H

### TYPICAL PROPERTIES:

<u>ITEM</u>	<u>TEST METHOD</u>	<u>UNIT</u>	<u>VALUES</u>
SPIRAL FLOW	SB-U-03-003	cm	90
GEL TIME (at 175°C)	SB-U-03-005	sec	30
THERMAL EXPANSION ∞1	SB-U-02-002	X 10 <sup>-5</sup> 1/°C	0.8
THERMAL EXPANSION ∞2	SB-U-02-002	X 10 <sup>-5</sup> 1/°C	3.4
T <sub>g</sub>	SB-U-02-002	°C	150
THERMAL CONDUCTIVITY	SB-U-02-004	W/m •°C	92 x 10 <sup>-2</sup>
FLEXURAL STRENGTH	SB-U-01-001	N/ mm <sup>2</sup>	
(at 25°C)			170
(at 240°C)			22
FLEXURAL MODULUS	SB-U-01-002	X 10 <sup>2</sup> N/mm <sup>2</sup>	
(at 25°C)			270
(at 240°C)			9.5
SPECIFIC GRAVITY	SB-U-03-018	-----	2.01
VOLUME RESISTIVITY	SB-U-00-004	Ω - cm	1.0 x 10 <sup>13</sup>
(at 150°C)			
UL FLAME CLASS	SB-U-03-003	UL-94	V-0
WATER ABSORPTION	SB-U-03-002	% weight gain	0.12
(boiling, 24 h)			
EXTRACTED Na <sup>+</sup>	SB-U-04-043	ppm	1
EXTRACTED Cl <sup>-</sup>	SB-U-04-043	ppm	5

TYPICAL, NOT GUARANTEED PROPERTIES

### MOLDING AND POST MOLD CURE CONDITIONS:

	<u>STANDARD</u>	<u>RANGE</u>
TRANSFER PRESSURE	85 x 10 <sup>6</sup> Pa	70-120 x 10 <sup>6</sup> Pa
MOLD TEMPERATURE	175°C	165-180°C
CURE TIME (C or A)#	C/100 sec	80-120 sec
POST-MOLD CURE TEMP	175°C	170-180°C
POST-MOLD CURE TIME	2 h	0-8 h

#Conventional or Auto

rev. Nov.'00

The information contained herein is true and accurate to our best knowledge. Sumitomo Bakelite Co., makes no warranty or guarantee of results and assumes no obligation or liabilities from the use of any products mentioned herein. This publication is not to be taken as license to operate under or recommendations to infringe upon any patents.



SUMITOMO BAKELITE CO., LTD.

Tennoz Parkside Building, 5-8 Higashi-Shinagawa, 2-Chome Shinagawa-ku, Tokyo 140, Japan