Background Statement for SEMI Draft Document 6061

REAPPROVAL OF SEMI M12-0706 (Reapproved 1011) - SPECIFICATION FOR SERIAL ALPHANUMERIC MARKING OF THE FRONT SURFACE OF WAFERS

Notice: This background statement is not part of the balloted item. It is provided solely to assist the recipient in reaching an informed decision based on the rationale of the activity that preceded the creation of this Document.

Notice: Recipients of this Document are invited to submit, with their comments, notification of any relevant patented technology or copyrighted items of which they are aware and to provide supporting documentation. In this context, "patented technology" is defined as technology for which a patent has issued or has been applied for. In the latter case, only publicly available information on the contents of the patent application is to be provided.

Background
Per SEMI *Regulations* § 8.9.1, the Originating TC Chapter shall review its Standards and decide whether to ballot the Standards for reapproval, revision, replacement, or withdrawal by the end of the fifth year after their latest publication or reapproval dates.

The Information and Control NA TC Chapter reviewed M12-0706 and recommended to issue a reapproval ballot.

Per SEMI *Procedure Manual* (NOTE 19), a reapproval Letter Ballot should include the Purpose, Scope, Limitations, and Terminology sections, along with the full text of any paragraph in which editorial updates are being made.

Voter requests for access to the full Standard or Safety Guideline must be made at least three business days before the voting deadline. Late requests may not be honored.

Review and Adjudication Information

	Task Force Review	**Committee Adjudication**
Group:	Traceability 5 Year Review TF	Traceability NA TC Chapter
Date:	July 10, 2017	July 10, 2017
Time & Timezone:	9:00 AM- 11:00AM PST	11:00 AM- 12:00PM PST
Location:	Marriott Marquis Hotel	Marriott Marquis Hotel
City, State/Country:	San Francisco, California / USA	San Francisco, California / USA
Leader(s)/Authors:	Yaw Obeng (NIST) Win Baylies (BayTEch-Resor)	Yaw Obeng (NIST) Win Baylies (BayTEch-Resor)
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Meeting details are subject to change, and additional review sessions may be scheduled if necessary. Contact the task force leaders or Standards staff for confirmation.

Telephone and web information will be distributed to interested parties as the meeting date approaches. If you will not be able to attend these meetings in person but would like to participate by telephone/web, please contact Standards staff.

Check www.semi.org/standards on calendar of event for the latest meeting schedule.

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LETTER BALLOT

SEMI Draft Document 6061

REAPPROVAL OF SEMI M12-0706 (Reapproved 1011) - SPECIFICATION FOR SERIAL ALPHANUMERIC MARKING OF THE FRONT SURFACE OF WAFERS

This Standard was technically approved by the global Traceability Technical Committee. This edition was approved for publication by the global Audits and Reviews Subcommittee on September 12, 2011. Available at www.semiviews.org and www.semi.org in October 2011; originally published in 1988; previously published July 2006.

NOTICE: This Document was reapproved with minor editorial changes.

1 Purpose

1.1 This Specification provides a serial alphanumeric marking of silicon or other semiconductor wafers. The wafer serial number links the properties of the wafer stored in an appropriate database system to each individual wafer for purposes of tracking and control during wafer and device manufacture.

1.2 By defining the basic code used for the mark, this Specification ensures the consistency of wafer marking performed by wafer manufacturers. Thus, it allows simplification of the performance requirements of automatic optical character reading (OCR) equipment, provides for unassisted and immediate human readability without wafer handling, and facilitates resolution of wafer level process variations.

1.3 The marking code is intended to be valid for a broad range of wafer products (i.e., epi, SOI, processed polished wafers, etc.).

2 Scope

2.1 This Specification defines the geometric and spatial limits of the alphanumeric code, specifically for serial identification of flatted and notched silicon wafers.

2.2 This Specification does NOT address the marking techniques that may be employed when complying with this Standard.

NOTICE: SEMI Standards and Safety Guidelines do not purport to address all safety issues associated with their use. It is the responsibility of the users of the documents to establish appropriate safety and health practices, and determine the applicability of regulatory or other limitations prior to use.

3 Referenced Standards and Documents

3.1 *SEMI Standards and Safety Guidelines*

SEMI M13 — Specification for Alphanumeric Marking of Silicon Wafers

3.2 *Other Documents*

SEMI AUX001 — List of Vendor Identification Codes

SEMI AUX015 — SEMI OCR Character Outlines

NOTICE: Unless otherwise indicated, all documents cited shall be the latest published versions.

4 Terminology

4.1 *Definitions*

4.1.1 *adjacent character misalignment, R_{adj}* — the vertical distance between the character baselines of two adjacent characters on the same line.

4.1.2 *character separation* — the horizontal distance between the adjacent boundaries of any two adjacent characters.

4.1.3 *character spacing* — the horizontal distance between the character centerlines of any two adjacent characters.

4.1.4 *character window* — the rectangular window within which all characters must be contained.

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4.1.5 *front surface of the wafer* — the exposed surface upon which active semiconductor devices have been or will be fabricated.

4.1.6 *line character misalignment, R_{line}* — the vertical distance between the character baselines of the highest and the lowest characters on the same line.