

SEMI D5-94 (Reapproved 0703) STANDARD SIZE FOR FLAT PANEL DISPLAY SUBSTRATES

This Standard was technically approved by the Flat Panel Display Global Technical Committee. This edition was approved for publication by the global Audits and Reviews Subcommittee on April 28, 2003. Available at www.semi.org in July 2003; originally published in 1993; previously published in 1994.

NOTICE: This Standard or Safety Guideline has an Inactive Status because the conditions to maintain Current Status have not been met. Inactive Standards or Safety Guidelines are available from SEMI and continue to be valid for use.

1 Purpose

1.1 This Standard covers the specification of nominal edge length and thickness and related tolerances of a flat panel display substrate.

2 Scope

2.1 These dimensions apply to substrates that are principally used in fabricating AMLCD displays. These dimensions may also be applicable to substrates for other display types. The edge lengths specified range from 300×300 mm to 500×500 mm. A single thickness, 1.1 mm, applied to all substrates.

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3 Referenced Standards and Documents

3.1 SEMI Standards and Safety Guidelines

SEMI D3 — Quality Area Specification for Flat Panel Display Substrates

SEMI D4 — Method for Referencing Flat Panel Display Substrates

SEMI D12 — Specification for Edge Condition of Flat Panel Display (FPD) Substrates

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

4 Dimensions

4.1 Edge Length

Table 1 Standard (Arithmetical Progression) Edge Length (mm)

300 × 300	300 × 350	300 × 400	300 × 450	300 × 500
	350 × 350	350 × 400	350 × 450	350 × 500
		400 × 400	400 × 450	400 × 500
			450 × 450	450 × 500
				500 × 500

#1 For substrates larger than $500 \text{ mm} \times 500 \text{ mm}$, it is recommended that the edge lengths be increased in increments of 50 mm.

Table 2 Standard Edge Length (mm)

320 mm × 300 mm
320 mm × 400 mm
360 mm × 465 mm

Table 3 Edge Length Tolerance

<i>Nominal</i>	<i>Tolerance</i>
<400 mm	±0.2 mm
≥400 mm	±0.3 mm

4.2 Thickness — 1.1 ± 0.1 mm

NOTE 1: Nominal values and tolerances for thickness <1.1 mm, and >1.1 mm are under discussion.

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