ÉlanSC520 Microcontroller

AMD

Datasheet

This document amends the *ÉlanSC520 Microcontroller Datasheet*, order #22003B.

DOCUMENTATION DEFECTS AND CORRECTIONS

The following corrections apply:

- On page 2 of the datasheet, add a new temperature range:

  I = Industrial (T_A = –40°C to +85°C)
  where: T_A = ambient temperature

  Also on page 2, add a new row to the Valid Combinations table. The complete revised table is reproduced here:

Valid Combinations	
ÉlanSC520–100 ÉlanSC520–133	AC
ÉlanSC520–100	AI

- On page 48, in the heading "Operating Ranges At Commercial Temperatures," change "Commercial" to "Commercial and Industrial."

  Also on page 48, add a new operating range parameter, $T_{AMBIENT}$, for industrial ambient temperature. Minimum value: –40°C. Maximum value: +85°C

- On page 50, in the heading "DC Characteristics over Commercial Operating Ranges," change "Commercial" to "Commercial and Industrial."

- On page 56, in the section titled "Thermal Characteristics," change "The ÉlanSC520 microcontroller is…" to "ÉlanSC520 microcontroller commercial temperature devices are..." in the first sentence.

- On page 57, replace Table 15 with the updated version reproduced below. This new table adds a new row for T_{CASE} = 100°C.

- On page 59, in the heading "Switching Characteristics over Commercial Operating Ranges," change "Commercial" to "Commercial and Industrial."

Table 15.   Maximum T_A for Plastic BGA Package with 6-Layer Board[1]

T_{CASE}	CPU Clock Rate	Airflow (Linear Feet Per Minute)				
		0	200	400	600	800
85°C	133 MHz	67.3°C	69.8°C	71.3°C	72.2°C	72.7°C
	100 MHz	70.1°C	72.2°C	73.5°C	74.3°C	74.7°C
100°C[2]	100 MHz	85.1°C	87.2°C	88.5°C	89.3°C	89.7°C

Notes:

1. The board type is described in the JEDEC standards document entitled Thermal Test Chip Guideline (Wire Bond Type Chip) *at www.jedec.org. On the home page click on the link Free Standards and Docs, and then click on the document link JESD51-4 under JEDEC PUBLICATIONS.*

2. T_{CASE} = 100°C data is for industrial temperature devices only.

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