Technical note

SPC58EHx, SPC58NHx IO definition: signal description and input multiplexing tables

Overview

This document applies to SPC58EHx, SPC58NHx devices in accordance with Table 1.

The IO definition is contained in a Microsoft Excel® workbook file attached to this document. Locate the paperclip symbol on the left side of the PDF window, and click it. Double-click on the Excel file to open it.

This file includes the following information:

- Package pinouts
- Pin descriptions
  - Power supply and reference voltage pins
  - System pins
  - LVDS pins
  - Functional pins and associated alternate functions

The table below lists all part numbers available in the SPC58EHx, SPC58NHx family:

Table 1. Device summary

Package	Part number					
	6 MB		8 MB		10 MB	
	Dual core	Triple core	Dual core	Triple core	Dual core	Triple core
eTQFP144	SPC58EH84E5	SPC58NH84E5	SPC58EH90E5	SPC58NH90E5	SPC58EH92E5	SPC58NH92E5
eLQFP176	SPC58EH84E7	SPC58NH84E7	SPC58EH90E7	SPC58NH90E7	SPC58EH92E7	SPC58NH92E7
FPBGA302	SPC58EH84C3	SPC58NH84C3	SPC58EH90C3	SPC58NH90C3	SPC58EH92C3	SPC58NH92C3
FPBGA386	SPC58EH84C5	SPC58NH84C5	SPC58EH90C5	SPC58NH90C5	SPC58EH92C5	SPC58NH92C5

Revision history

Table 2. Document revision history

Date	Revision	Changes
15-Nov-2017	1	Initial release based on device pinout Microsoft Excel® file v1.10
19-Apr-2018	2	This release is based on the attached pinout Microsoft Excel® file v1.16. Changes compared to the pinout Microsoft Excel® file attached to Rev1 are the following: • Inserted Datasheet names for power supply segments. • Removed label "preliminary" from Title worksheet. • Added alternate function table (replacing Pad table). • Ordered supplies in Supply Pins worksheet. • Removed non-existing balls from BGA unconnected ball list. • Added some footnotes. • Re-styling of package sheets with additional information. • Added missing power supply names in Supply Pins sheet. • Corrected CAN enumeration format. • Updated Supplies worksheet (removed supply rail column and direction columns) • Updated Ethernet AF descriptions • Added missing “eMMC” supplies.
17-Sep-2018	3	This release is based on the attached pinout Microsoft Excel® file v1.17. Compared to the pinout Microsoft Excel® file attached to Rev2 this version is related to cut 2 pinout.
24-Sep-2018	4	Minor editorial changes. No update in the attached pinout Microsoft Excel® file.
18-Oct-2019	5	This release is based on the attached pinout Microsoft Excel® file v5 Compared to the pinout Microsoft Excel® file attached to Rev 3 and 4 this version includes the following changes: • HPREG_SEL is no more available on D10/C9 for BGA386/302 respectively. Not needed since SMPS no more supported • EXTREG_SEL is bonded on Pin 26/24 for QFP176/144 respectively. • PK[0] is no more bonded on Pin 26/24 for QFP176/144 respectively
08-Nov-2019	6	This release is based on the attached pinout Microsoft Excel® file v6. Compared to the pinout Microsoft Excel® file attached to Rev 5 this version includes the following change: • Non-mapped eMMC and OctalSPI alternate functions removed
31-Mar-2020	7	This release is based on the attached pinout Microsoft Excel® file v7. Compared to the pinout Microsoft Excel® file attached to Rev 6 this version includes the following change: • Added OctalSPI CSN1 on PAD[57]
07-Jun-2021	8	Changed the classification of the document from ST Restricted to Public.

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