

| Name | Туре | Description | | |
|----------|------|--|--|--|
| | | Notes: 1. Unless CMOS is being cleared (only to be done in the G3 power state) with a jumper, the RTCRST# input must always be high when all other RTC power planes are on. | | |
| | | In the case where the RTC battery is dead or missing on the platform, the RTCRST# pin must rise before the DSW_PWROK pin. | | |
| | | Secondary RTC Reset : This signal resets the manageability register bits in the RTC well when the RTC battery is removed. | | |
| SRTCRST# | I | Notes: 1. The SRTCRST# input must always be high when all other RTC power planes are on. | | |
| | | In the case where the RTC battery is dead or missing on the platform, the SRTCRST# pin must rise before the DSW_PWROK pin. SRTCRST# and RTCRST# should not be shorted together. | | |

23.2 I/O Signal Planes and States

| Signal Name | Power Plane | During Reset ¹ | Immediately after Reset ¹ | S4/S5 | Deep Sx | | |
|--|-------------|---------------------------|--------------------------------------|----------|----------|--|--|
| RTCRST# | RTC | Undriven | Undriven | Undriven | Undriven | | |
| SRTCRST# RTC | | Undriven | Undriven | Undriven | Undriven | | |
| Note: 1. Reset reference for RTC well pins is RTCRST#. | | | | | | | |

Intel® 700 Series Chipset Family On-Package Platform Controller Hub (PCH) January 2023

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Intel® 700 Series Chipset Family On-Package Platform Controller Hub (PCH)

Datasheet, Volume 1 of 2

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24.0 System Management Interface and SMLink

The PCH provides two SMLink interfaces, SMLink0 and SMLink1. The interfaces are intended for system management and are controlled by the Intel[®] CSME. Refer to System Management on page 28 for more detail.

Table 67. Acronyms

| Acronyms | Description | |
|----------|---------------------------------|--|
| ВМС | Baseboard Management Controller | |
| EC | Embedded Controller | |

24.1 Functional Description

The SMLink interfaces are controlled by the Intel® CSME.

SMLink0 is mainly used for integrated LAN. When an Intel LAN PHY is connected to SMLink0, a soft strap must be set to indicate that the PHY is connected to SMLink0. The interface will be running at the frequency of up to 1 MHz depending on different factors such as board routing or bus loading when the Fast Mode is enabled using a soft strap.

SMLink1 can be used with an Embedded Controller (EC) or Baseboard Management Controller (BMC).

Both SMLink0 and SMLink1 support up to 1 MHz.

NOTE

Access to the PCH thermal sensor should be via eSPI. as the SMLink 1 is disabled in Consumer platforms.

24.1.1 Integrated USB-C Usage

SMLink1 is used to communicate with USB-C* PD Controller on the platform to configure different modes such as USB, DP, Thunderbolt etc. When used for Integrated USB-C purposes, a soft strap must be set to indicate that integrated USB-C ports from CPU are being used.

SMLINK1 uses master mode and gets an alert signal from PMCALERT#.

Based on capabilities of different PD Controllers, re-timers needed for USB-C connector on the platform may need to be controlled by SoC also. In these cases, both PD Controller and Re-timers will be connected to SMLink1. SMLink1 is used for all USB-C connectors on the platform.