Why IRQ200 is always seen on APSS wakeup from power collapse? Is it reason for wakeup?

Solution Number 00029201

Please Note:
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Language Key Words

Detail Information

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Solution Details

Question:Why IRQ200 is always seen on APSS wakeup from power collapse? Is it reason for wakeup?
Answer:
IRQ 200 is SMD channel “rpm_requests”, used for message between APPS and RPM.
When apss side enter power collapse(sleep mode 3), it will call file rpm_smd.c, func msm_rpm_enter_sleep. During power collapse, the rpm driver disables the SMD interrupts(IRQ 200) , IRQ200 interrupt cannot wakes APPS from sleep.

```
int msm_rpm_enter_sleep(bool print)
{
if (standalone)
return 0;

msm_rpm_flush_requests(print); //send all rpm requests to RPM

return smd_mask_receive_interrupt(msm_rpm_data.ch_info, true); //disable irq 200 for wakeup
}
```

Response for the request messages send from AP to RPM before power collapse, it’s sent after RPM side done APSS sleep set configuration requests, see RPM function:
Rpm_handler.cpp (core\power\rpm\server) Handler::processMessage-> writeResponse.
Because AP disable IRQ200—prevent RPM side message send to AP when it’s power collapsed, it’s normal to see these responses after AP enable IRQ200 again after wakeup.

Applicable Products MSM8226, MSM8974AC