

## SD Host Controller Simplified Specification Version 4.20

25	RO	<p><b>Host Regulator Voltage Stable</b> This status is added from Version 4.10 and is used to check whether host regulator voltage is stable for switching signal voltage of UHS-I mode.</p> <table border="1" data-bbox="517 405 1145 472"> <tr> <td>1</td> <td>Host Regulator Voltage is stable</td> </tr> <tr> <td>0</td> <td>Host Regulator Voltage is not stable</td> </tr> </table> <p>Support of this function is checked by reading this status after that <b>Software Reset For All</b> in the <i>Software Reset</i> register is cleared by the Host Controller in initialization. Setting of this status means that the Host Controller supports this function.</p> <p>This status may be related to <b>1.8V Signaling Enable</b> in the <i>Host Control 2</i> register. Changing <b>1.8V Signaling Enable</b> causes unstable of host regulator voltage for I/O cell. Then once this status is set to 0 and retrieved to 1 when host regulator voltage is stable again. When executing power cycle, Host Driver also executes <b>Software Reset For All</b> and it clears 1.8V Signaling Enable to go back signal voltage to 3.3V.</p> <p>If this status is not supported, Host Driver should take more than 5ms for stable time of host voltage regulator from changing <b>1.8V Signaling Enable</b>. Specific Host Driver may use a specific time, which is provided by Host System, instead of using 5ms.</p>	1	Host Regulator Voltage is stable	0	Host Regulator Voltage is not stable				
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24	RO	<p><b>CMD Line Signal Level (SD Mode only)</b> This status is used to check the <b>CMD</b> line level to recover from errors, and for debugging.</p>								
23-20	RO	<p><b>DAT[3:0] Line Signal Level (SD Mode only)</b> This status is used to check the <b>DAT</b> line level to recover from errors, and for debugging. This is especially useful in detecting the busy signal level from <b>DAT[0]</b>.</p> <table border="1" data-bbox="517 1283 812 1413"> <tr> <td>D23</td> <td>DAT[3]</td> </tr> <tr> <td>D22</td> <td>DAT[2]</td> </tr> <tr> <td>D21</td> <td>DAT[1]</td> </tr> <tr> <td>D20</td> <td>DAT[0]</td> </tr> </table>	D23	DAT[3]	D22	DAT[2]	D21	DAT[1]	D20	DAT[0]
D23	DAT[3]									
D22	DAT[2]									
D21	DAT[1]									
D20	DAT[0]									
19	RO	<p><b>Write Protect Switch Pin Level</b> The Write Protect Switch is supported for memory and combo cards. This bit reflects the <b>SDWP#</b> pin.</p> <table border="1" data-bbox="517 1536 1031 1603"> <tr> <td>1</td> <td>Write enabled (<b>SDWP#=1</b>)</td> </tr> <tr> <td>0</td> <td>Write protected (<b>SDWP#=0</b>)</td> </tr> </table>	1	Write enabled ( <b>SDWP#=1</b> )	0	Write protected ( <b>SDWP#=0</b> )				
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18	RO	<p><b>Card Detect Pin Level</b> This bit reflects the inverse value of the <b>SDCD#</b> pin. Debouncing is not performed on this bit. This bit may be valid when <b>Card State Stable</b> is set to 1, but it is not guaranteed because of propagation delay. Use of this bit is limited to testing since it must be debounced by software.</p> <table border="1" data-bbox="517 1794 1035 1850"> <tr> <td>1</td> <td>Card present (<b>SDCD#=0</b>)</td> </tr> <tr> <td>0</td> <td>No card present (<b>SDCD#=1</b>)</td> </tr> </table>	1	Card present ( <b>SDCD#=0</b> )	0	No card present ( <b>SDCD#=1</b> )				
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