

HARD RESET

Step	Device 0	Device 1
a0,i	HOST asserts RESET-[=0] for $\geq 25\mu\text{s}$ [no max time specified before negation {=1}]	
b0,b1	Set BSY=1 $\leq 400\text{ns}$ after RESET- negated[=1]	Set BSY=1 $\leq 400\text{ns}$ after RESET- negated[=1]
c0,c1	<u>Release</u> DASP- [=1] $\leq 1\text{ms}$ after RESET- negated	<u>Release</u> DASP- [=1] $\leq 1\text{ms}$ after RESET- negated
d1		Negate PDIAG- [=1] before asserting DASP-[=0] [no time specified]
e1		Assert DASP-[=0] $\leq 400\text{ms}$ after RESET- negated
d0	Sample for DASP- asserted[=0] $\geq 1\text{ms}$ after RESET- negated [=1], sample for $\geq 450\text{ms}$ after RESET- negated [=1] [no max time or sample frequency specified]	
e0,f1	Perform hardware initialization and diagnostics	
f0,g1	May revert to default conditions[?]	
h1		Post diag results to Error register[no time specified]
i1		Clear BSY [=0] $\leq 30\text{s}$ from RESET- negated[=1] when ready for commands not requiring DRDY=1
j1		1) If passed diags, then assert PDIAG-[=0] $\leq 30\text{s}$ from RESET- negated[=1] [no time specified for duration of assertion] 2) <u>Set</u> signature in Task File (Sec Cnt=01, Sec Num=01, Cyl Low=00, Cyl Hi=00, D/H=00) [Step j1, item 2) MUST occur before step i1, because the Task File should be valid before BSY is cleared]
g0	1) If DASP- [=0] assertion by Device 1 detected: a) Sample PDIAG- for assertion[=0] by device $\geq 1\text{ms}$ and $\leq 31\text{s}$ from RESET- negated [=1] [no sample frequency specified] b) If PDIAG- assertion detected in time: clear bit 7 [=0] in Error Register c) If PDIAG- assertion NOT detected in time: set bit 7 [=1] in Error Register 2) If DASP- [=0] assertion by Device 1 NOT detected: clear bit 7 [=0] in Err Reg 3) <u>Set</u> signature in Task File (Sec Cnt=01, Sec Num=01, Cyl Low=00, Cyl Hi=00, D/H=00) 4) Store whether device 1 detected [just detection of (DASP-), or status of dev 1 (PDIAG-) also?]	
h0	Post diagnostic results in bits 0-6 of Error register	
i0	Clear BSY [=0] $\leq 31\text{s}$ from RESET- negated [=1] when ready for commands not requiring DRDY=1	
j0,k1	Set DRDY [=1] when ready to accept any command [no time specified, Note 24 says "host should allow up to 30 s" -- but from when?]	Set DRDY [=1] when ready to accept any command [no time specified, Note 25 says "host should allow up to 30 s" -- but from when?]
l1		<u>Release</u> DASP- after first command [to which device?] or $\leq 31\text{s}$ after RESET- asserted[=0] [shouldn't this be "negated?" {=1}]

SOFT RESET

Step	Device 0	Device 1
a0,i	HOST sets SRST =1 in the Device Control register	
b0,b1	Set BSY=1 ≤ 400ns after <i>detecting</i> SRST=1 [how long can it take to “detect” SRST=1?]	Set BSY=1 ≤ 400ns after <i>detecting</i> SRST=1 [how long can it take to “detect” SRST=1?]
c1		Negate PDIAG- [=1] ≤ 1ms after <i>detecting</i> SRST=1 [how long can it take to “detect” SRST=1?]
c0,d1	Perform hardware initialization and diagnostics	Perform hardware initialization and diagnostics
d0,e1	May revert to default conditions[?]	May revert to default conditions[?]
e0,f1	Post diagnostic results <i>in bits 0-6</i> of Error Register	Post diagnostic results <i>in bits 0-6</i> of Error Register
f0,g1	Wait for host to clear SRST[=0]	Wait for host to clear SRST[=0]
g0	1) If Device 1 detected at last pwr cycle or RST-: a) Sample PDIAG- for assertion [=0] by Device 1 ≥ 1ms and ≤ 31s from SRST=0 [no sample frequency specified] b) If PDIAG- assertion detected in time: clear bit 7 [=0] in Error Register c) If PDIAG- assertion NOT detected in time: set bit 7 [=1] in Error Register 2) If Devic 1 NOT detected at last power cycle or hard reset: clear bit 7 [=0] in Err Reg 3) <u>Set</u> signature in Task File (Sec Cnt=01, Sec Num=01, Cyl Low=00, Cyl Hi=00, D/H=00)	
h0,h1	Clear BSY [=0] ≤ 31s from SRST=0 when ready for commands not requiring DRDY=1	Clear BSY [=0] when ready for commands not requiring DRDY=1 [THIS DOES NOT BELONG HERE. BSY SHOULD BE CLEARED AFTER THE TASK FILE IS SET CORRECTLY.]
i1		1) If passed diags, then assert PDIAG- [=0] ≤ 30s from SRST=0 [no time specified for duration of assertion] 2) Clear BSY, assert PDIAG- [AGAIN?] 3) <u>Set</u> signature in Task File (Sec Cnt=01, Sec Num=01, Cyl Low=00, Cyl Hi=00, D/H=00) [Item 3) MUST occur before item 1) { 2)?}, because the Task File should be valid before BSY is cleared]
i0,j1	Set DRDY [=1] when ready to accept any command [no time specified, Note 28 says “host should allow up to 30 s” -- but from when?]	Set DRDY [=1] when ready to accept any command [no time specified, Note 29 says “host should allow up to 30 s” -- but from when?]