

Bit number				31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0																															
ID				D D D D D																C B B B A A A A															
Reset 0x01000002				0 0 0 0 0 0 0 0 1 0 1 0																															
ID	R/W	Field	Value ID	Value				Description																											
			NotBusy	0				Not busy.																											
			Busy	1				An abstract command is currently being executed. This bit is set as soon as command is written, and is not cleared until that command has completed.																											
D	R	PROGBUFSIZE			Size of the Program Buffer, in 32-bit words. Valid sizes are 0 - 1.																														

8.26.1.18 DEBUGIF.ABSTRACTCMD

Address offset: 0x45C

Abstract command

Bit number				31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
ID				B	B	B	B	B	B	B	B	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Reset 0x00000000				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ID	R/W	Field	Value ID	Value		Description																													
A	W	CONTROL				This Field is interpreted in a command specific manner, described for each abstract command.																													
B	W	CMDTYPE				The type determines the overall functionality of this abstract command.																													
			REGACCESS	0	Register Access Command																														
			QUICKACCESS	1	Quick Access Command																														
			MEMACCESS	2	Memory Access Command																														

8.26.1.19 DEBUGIF.ABSTRACTAUTO

Address offset: 0x460

Abstract Command Autoexec

This register is optional. Including it allows more efficient burst accesses. A debugger can detect whether it is support by setting bits and reading them back. Writing this register while an abstract command is executing causes cmderr to become 1 (busy) once the command completes (busy becomes 0).

Bit number				31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	
ID				B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	A	A	A	A	A	A	A	A	A	A	A	
Reset 0x00000000				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ID	R/W	Field	Value ID	Value																Description																
A	R	AUTOEXECDATA																			When a bit in this field is 1, read or write accesses to the corresponding data word cause the command in command to be executed again.															
B	R	AUTOEXECPROGBUF																			When a bit in this field is 1, read or write accesses to the corresponding progbuf word cause the command in command to be executed again.															

8.26.1.20 DEBUGIF.CONFSTRPTR[n] (n=0..3)

Address offset: 0x464 + (n × 0x4)

Configuration String Pointer [n]

When confstrptrvalid is set, reading this register returns bits 31:0 of the configuration string pointer. Reading the other confstrptr registers returns the upper bits of the address. When system bus mastering is implemented, this must be an address that can be used with the System Bus Access module. Otherwise, this must be an address that can be used to access the configuration string from the hart with ID 0.32 RISC-V External Debug Support Version 0.14.0-DRAFT If confstrptrvalid is 0, then the confstrptr registers hold identifier information.