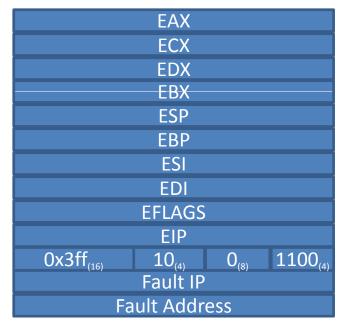


CtrlXferItem₁

CtrlXferItem₀

CtrlXferItem₀

Fault-Specific Data
Fault-Specific Data
Example



Example: Pagefault

mask: when reading or writing state, specifies which registers are valid. Invalid registers must not be included. Default exit state always contains the complete register subset.

size: specifies how many registers are contained within the item.

id: specifies the register subset represented by the item. Valid ids:

id ids:	
GPRegs: id = 0 EIP EFLAGS EDI ESI EBP ESP EBI EDI ECX EAX	FPURegs: id=1
CRegs: id = 2 CR0 CR1 CR2 CR3 CR4	DRegs: id = 3 DR0 DR1 DR2 DR3 DR6 DR7
CSRegs: id = 4 CS CS_BASE CS_LIMIT CS_ATTR	SSRegs: id = 5 SS SS_BASE SS_LIMIT SS_ATTR
DSRegs: id = 6 DS DS_BASE DS_LIMIT DS_ATTR	ESRegs: id = 7 ES ES_BASE ES_LIMIT ES_ATTR
FSRegs: id = 8 FS FS_BASE FS_LIMIT FS_ATTR	GSRegs: id = 9 GS GS_BASE GS_LIMIT GS_ATTR
TRRegs: id = 10 TR TR_BASE TR_LIMIT TR_ATTR	LDTRRegs: id = 11 LDTR LDTR_BASE LDTR_LIMIT LDTR_ATTR
IDTRRegs: id = 12 IDTR_BASE IDTR_LIMIT IDTR_ATTR	GDTRRegs: id = 13 GDTR_BASE GDTR_LIMIT GDTR_ATTR
MSRRegs = 14 SYSENTER_CS_MSR SYSENTER_EIP_MSR	Faultregs = 15 DELAYED_FAULT IMMEDIATE_FAULT

SYSENTER_ESP_MSR

ExchangeRegisters

seWRCdhpufisSRH

 $\begin{array}{c} \textbf{CtrlXferItem}_{w1} \\ \textbf{CtrlXferItem}_{w1} \\ \textbf{1100}_{\scriptscriptstyle{(4)}} \\ \textbf{CtrlXferItem}_{r1} \\ \textbf{1100}_{\scriptscriptstyle{(4)}} \\ \textbf{CtrlXferItem}_{r0} \\ \textbf{idmask}_{\scriptscriptstyle{(16)}} \\ \textbf{idmask}_{\scriptscriptstyle{(16)}} \\ \textbf{fault}_{\scriptscriptstyle{(8)}} \\ \textbf{1100}_{\scriptscriptstyle{(4)}} \\ \textbf{$

MRs

e: set exception handler

s: set scheduler

C: Configure default fault ctrlxfer items

R: Read ctrlxfer state, specified in MRs

W: Read ctrlxfer state, specified in MRs

For reading, all register space must be provided

The default ctrlxfer state send with the fault IPC Only complete items can be specified