Index by functional group

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In the ID functional group:

Exec state	Name	Description
AArch32	CCSIDR	Current Cache Size ID Register
AArch32	CCSIDR2	Current Cache Size ID Register 2
AArch32	<u>CLIDR</u>	Cache Level ID Register
AArch32	CSSELR	Cache Size Selection Register
AArch32	<u>CTR</u>	Cache Type Register
AArch32	<u>ID_AFR0</u>	Auxiliary Feature Register 0
AArch32	<u>ID_DFR0</u>	Debug Feature Register 0
AArch32	<u>ID_DFR1</u>	Debug Feature Register 1
AArch32	<u>ID_ISAR0</u>	Instruction Set Attribute Register 0
AArch32	ID_ISAR1	Instruction Set Attribute Register 1
AArch32	ID_ISAR2	Instruction Set Attribute Register 2
AArch32	ID_ISAR3	Instruction Set Attribute Register 3
AArch32	ID_ISAR4	Instruction Set Attribute Register 4
AArch32	ID_ISAR5	Instruction Set Attribute Register 5
AArch32	ID_ISAR6	Instruction Set Attribute Register 6
AArch32	ID_MMFR0	Memory Model Feature Register 0
AArch32	ID_MMFR1	Memory Model Feature Register 1
AArch32	ID_MMFR2	Memory Model Feature Register 2
AArch32	ID_MMFR3	Memory Model Feature Register 3
AArch32	ID_MMFR4	Memory Model Feature Register 4
AArch32	ID_MMFR5	Memory Model Feature Register 5
AArch32	ID_PFR0	Processor Feature Register 0
AArch32	ID_PFR1	Processor Feature Register 1
AArch32	ID_PFR2	Processor Feature Register 2
AArch32	MIDR	Main ID Register
AArch32	<u>MPIDR</u>	Multiprocessor Affinity Register
AArch32	REVIDR	Revision ID Register
AArch32	<u>TCMTR</u>	TCM Type Register
AArch32	<u>TLBTR</u>	TLB Type Register

Exec state	Name	Description
AArch64	CCSIDR2_EL1	Current Cache Size ID Register 2
AArch64	CCSIDR_EL1	Current Cache Size ID Register
AArch64	CLIDR_EL1	Cache Level ID Register
AArch64	CSSELR_EL1	Cache Size Selection Register
AArch64	CTR_ELO	Cache Type Register
AArch64	DCZID_EL0	Data Cache Zero ID Register
AArch64	GMID_EL1	Multiple tag transfer ID Register
AArch64	ID_AA64AFR0_EL1	AArch64 Auxiliary Feature Register 0
AArch64	ID_AA64AFR1_EL1	AArch64 Auxiliary Feature Register 1
AArch64	ID_AA64DFR0_EL1	AArch64 Debug Feature Register
AArch64	ID_AA64DFR1_EL1	AArch64 Debug Feature Register 1
AArch64	ID_AA64ISAR0_EL1	AArch64 Instruction Set Attribute Register 0
AArch64	ID_AA64ISAR1_EL1	AArch64 Instruction Set Attribute Register 1
AArch64	ID_AA64ISAR2_EL1	AArch64 Instruction Set Attribute Register 2
AArch64	ID_AA64MMFR0_EL1	AArch64 Memory Model Feature Register 0
AArch64	ID_AA64MMFR1_EL1	AArch64 Memory Model Feature Register 1
AArch64	ID_AA64MMFR2_EL1	AArch64 Memory Model Feature Register 2
AArch64	ID_AA64MMFR3_EL1	AArch64 Memory Model Feature Register 3
AArch64	ID_AA64MMFR4_EL1	AArch64 Memory Model Feature Register 4
AArch64	ID_AA64PFR0_EL1	AArch64 Processor Feature Register 0
AArch64	ID_AA64PFR1_EL1	AArch64 Processor Feature Register 1
AArch64	ID_AA64PFR2_EL1	AArch64 Processor Feature Register 2
AArch64	ID_AA64SMFR0_EL1	SME Feature ID Register 0
AArch64	ID AA64ZFR0 EL1	SVE Feature ID Register 0
AArch64	ID_AFR0_EL1	AArch32 Auxiliary Feature Register 0
AArch64	ID_DFR0_EL1	AArch32 Debug Feature Register
AArch64	ID_DFR1_EL1	Debug Feature Register 1

Exec state	Name	Description
AArch64	ID_ISAR0_EL1	AArch32 Instruction Set Attribute Register 0
AArch64	ID_ISAR1_EL1	AArch32 Instruction Set Attribute Register 1
AArch64	ID_ISAR2_EL1	AArch32 Instruction Set Attribute Register 2
AArch64	ID_ISAR3_EL1	AArch32 Instruction Set Attribute Register 3
AArch64	ID_ISAR4_EL1	AArch32 Instruction Set Attribute Register 4
AArch64	ID_ISAR5_EL1	AArch32 Instruction Set Attribute Register 5
AArch64	ID_ISAR6_EL1	AArch32 Instruction Set Attribute Register 6
AArch64	ID_MMFR0_EL1	AArch32 Memory Model Feature Register 0
AArch64	ID_MMFR1_EL1	AArch32 Memory Model Feature Register 1
AArch64	ID_MMFR2_EL1	AArch32 Memory Model Feature Register 2
AArch64	ID_MMFR3_EL1	AArch32 Memory Model Feature Register 3
AArch64	ID_MMFR4_EL1	AArch32 Memory Model Feature Register 4
AArch64	ID_MMFR5_EL1	AArch32 Memory Model Feature Register 5
AArch64	ID_PFR0_EL1	AArch32 Processor Feature Register 0
AArch64	ID_PFR1_EL1	AArch32 Processor Feature Register 1
AArch64	ID_PFR2_EL1	AArch32 Processor Feature Register 2
AArch64	MIDR EL1	Main ID Register
AArch64	MPAMIDR EL1	MPAM ID Register (EL1)
AArch64	MPIDR EL1	Multiprocessor Affinity Register
AArch64	REVIDR_EL1	Revision ID Register
AArch64	SMIDR_EL1	Streaming Mode Identification Register
External	EDAA32PFR	External Debug Auxiliary Processor Feature Register
External	EDDFR	External Debug Feature Register
External	EDPFR	External Debug Processor Feature Register
External	MIDR_EL1	Main ID Register

In the Memory functional group:

Exec state	Name	Description
AArch32	AMAIR0	Auxiliary Memory Attribute Indirection Register 0
AArch32	AMAIR1	Auxiliary Memory Attribute Indirection Register 1
AArch32	<u>CONTEXTIDR</u>	Context ID Register
AArch32	<u>DACR</u>	Domain Access Control Register
AArch32	<u>HAMAIR0</u>	Hyp Auxiliary Memory Attribute Indirection Register 0
AArch32	HAMAIR1	Hyp Auxiliary Memory Attribute Indirection Register 1
AArch32	<u>HMAIR0</u>	Hyp Memory Attribute Indirection Register 0
AArch32	<u>HMAIR1</u>	Hyp Memory Attribute Indirection Register 1
AArch32	<u>HTCR</u>	Hyp Translation Control Register
AArch32	<u>HTTBR</u>	Hyp Translation Table Base Register
AArch32	MAIR0	Memory Attribute Indirection Register 0
AArch32	MAIR1	Memory Attribute Indirection Register 1
AArch32	<u>NMRR</u>	Normal Memory Remap Register
AArch32	<u>PRRR</u>	Primary Region Remap Register
AArch32	TTBCR	Translation Table Base Control Register
AArch32	TTBCR2	Translation Table Base Control Register 2
AArch32	TTBR0	Translation Table Base Register 0
AArch32	TTBR1	Translation Table Base Register 1
AArch32	<u>VTCR</u>	Virtualization Translation Control Register
AArch32	<u>VTTBR</u>	Virtualization Translation Table Base Register
AArch64	AMAIR2_EL1	Extended Auxiliary Memory Attribute Indirection Register (EL1)
AArch64	AMAIR2_EL2	Extended Auxiliary Memory Attribute Indirection Register (EL2)
AArch64	AMAIR2_EL3	Extended Auxiliary Memory Attribute Indirection Register (EL3)
AArch64	AMAIR_EL1	Auxiliary Memory Attribute Indirection Register (EL1)
AArch64	AMAIR_EL2	Auxiliary Memory Attribute Indirection Register (EL2)

Exec state	Name	Description
AArch64	AMAIR_EL3	Auxiliary Memory Attribute Indirection Register (EL3)
AArch64	CONTEXTIDR EL1	Context ID Register (EL1)
AArch64	CONTEXTIDE EL2	Context ID Register (EL2)
AArch64	DACR32 EL2	Domain Access Control Register
AArch64	GPCCR_EL3	Granule Protection Check Control Register (EL3)
AArch64	GPTBR_EL3	Granule Protection Table Base Register
AArch64	LORC EL1	LORegion Control (EL1)
AArch64	LOREA EL1	LORegion End Address (EL1)
AArch64	LORID EL1	LORegionID (EL1)
AArch64	LORN EL1	LORegion Number (EL1)
AArch64	LORSA EL1	LORegion Start Address (EL1)
AArch64	MAIR2_EL1	Extended Memory Attribute Indirection Register (EL1)
AArch64	MAIR2_EL2	Extended Memory Attribute Indirection Register (EL2)
AArch64	MAIR2_EL3	Extended Memory Attribute Indirection Register (EL3)
AArch64	MAIR_EL1	Memory Attribute Indirection Register (EL1)
AArch64	MAIR_EL2	Memory Attribute Indirection Register (EL2)
AArch64	MAIR_EL3	Memory Attribute Indirection Register (EL3)
AArch64	PIREO_EL1	Permission Indirection Register 0 (EL1)
AArch64	PIREO_EL2	Permission Indirection Register 0 (EL2)
AArch64	PIR_EL1	Permission Indirection Register 1 (EL1)
AArch64	PIR_EL2	Permission Indirection Register 2 (EL2)
AArch64	PIR_EL3	Permission Indirection Register 3 (EL3)
AArch64	POR_ELO	Permission Overlay Register 0 (EL0)
AArch64	POR_EL1	Permission Overlay Register 1 (EL1)
AArch64	POR_EL2	Permission Overlay Register 2 (EL2)
AArch64	POR_EL3	Permission Overlay Register 3 (EL3)

Exec state	Name	Description
AArch64	RCWMASK_EL1	Read Check Write Instruction Mask (EL1)
AArch64	RCWSMASK_EL1	Software Read Check Write Instruction Mask (EL1)
AArch64	S2PIR_EL2	Stage 2 Permission Indirection Register (EL2)
AArch64	S2POR_EL1	Stage 2 Permission Overlay Register (EL1)
AArch64	TCR2_EL1	Extended Translation Control Register (EL1)
AArch64	TCR2_EL2	Extended Translation Control Register (EL2)
AArch64	TCR_EL1	Translation Control Register (EL1)
AArch64	TCR_EL2	Translation Control Register (EL2)
AArch64	TCR_EL3	Translation Control Register (EL3)
AArch64	TTBR0_EL1	Translation Table Base Register 0 (EL1)
AArch64	TTBR0_EL2	Translation Table Base Register 0 (EL2)
AArch64	TTBR0_EL3	Translation Table Base Register 0 (EL3)
AArch64	TTBR1_EL1	Translation Table Base Register 1 (EL1)
AArch64	TTBR1_EL2	Translation Table Base Register 1 (EL2)
AArch64	VTCR_EL2	Virtualization Translation Control Register
AArch64	VTTBR_EL2	Virtualization Translation Table Base Register

In the Other functional group:

cess Control
cess Control
cess Control
(EL1)
(EL3)
(EL1)
(EL3)
L1)
L(2)

Exec state	Name	Description
AArch64	SMCR_EL3	SME Control Register (EL3)
AArch64	SMPRIMAP_EL2	Streaming Mode Priority Mapping Register
AArch64	SMPRI_EL1	Streaming Mode Priority Register
AArch64	ZCR_EL1	SVE Control Register (EL1)
AArch64	ZCR_EL2	SVE Control Register (EL2)
AArch64	ZCR_EL3	SVE Control Register (EL3)

In the Exception functional group:

Exec state	Name	Description
AArch32	<u>ADFSR</u>	Auxiliary Data Fault Status Register
AArch32	AIFSR	Auxiliary Instruction Fault Status Register
AArch32	<u>DFAR</u>	Data Fault Address Register
AArch32	<u>DFSR</u>	Data Fault Status Register
AArch32	<u>HADFSR</u>	Hyp Auxiliary Data Fault Status Register
AArch32	<u>HAIFSR</u>	Hyp Auxiliary Instruction Fault Status Register
AArch32	<u>HDFAR</u>	Hyp Data Fault Address Register
AArch32	<u>HIFAR</u>	Hyp Instruction Fault Address Register
AArch32	<u>HPFAR</u>	Hyp IPA Fault Address Register
AArch32	<u>HSR</u>	Hyp Syndrome Register
AArch32	<u>HVBAR</u>	Hyp Vector Base Address Register
AArch32	<u>IFAR</u>	Instruction Fault Address Register
AArch32	<u>IFSR</u>	Instruction Fault Status Register
AArch32	<u>ISR</u>	Interrupt Status Register
AArch32	<u>MVBAR</u>	Monitor Vector Base Address Register
AArch32	<u>VBAR</u>	Vector Base Address Register
AArch64	AFSR0_EL1	Auxiliary Fault Status Register 0 (EL1)
AArch64	AFSR0_EL2	Auxiliary Fault Status Register 0 (EL2)
AArch64	AFSR0_EL3	Auxiliary Fault Status Register 0 (EL3)
AArch64	AFSR1_EL1	Auxiliary Fault Status Register 1 (EL1)
AArch64	AFSR1_EL2	Auxiliary Fault Status Register 1 (EL2)
AArch64	AFSR1_EL3	Auxiliary Fault Status Register 1 (EL3)
AArch64	ESR_EL1	Exception Syndrome Register (EL1)
AArch64	ESR_EL2	Exception Syndrome Register (EL2)
AArch64	ESR_EL3	Exception Syndrome Register (EL3)
AArch64	FAR_EL1	Fault Address Register (EL1)
AArch64	FAR_EL2	Fault Address Register (EL2)
AArch64	FAR_EL3	Fault Address Register (EL3)
AArch64	HPFAR_EL2	Hypervisor IPA Fault Address Register
AArch64	IFSR32_EL2	Instruction Fault Status Register (EL2)

Exec state	Name	Description
AArch64	ISR_EL1	Interrupt Status Register
AArch64	VBAR_EL1	Vector Base Address Register (EL1)
AArch64	VBAR_EL2	Vector Base Address Register (EL2)
AArch64	VBAR_EL3	Vector Base Address Register (EL3)

In the Special functional group:

Exec state	Name	Description
AArch32	DLR	Debug Link Register
AArch32	<u>DSPSR</u>	Debug Saved Program Status Register
AArch32	ELR_hyp	Exception Link Register (Hyp mode)
AArch32	<u>SPSR</u>	Saved Program Status Register
AArch32	SPSR_abt	Saved Program Status Register (Abort mode)
AArch32	SPSR_fiq	Saved Program Status Register (FIQ mode)
AArch32	SPSR_hyp	Saved Program Status Register (Hyp mode)
AArch32	SPSR_irq	Saved Program Status Register (IRQ mode)
AArch32	SPSR_mon	Saved Program Status Register (Monitor mode)
AArch32	SPSR_svc	Saved Program Status Register (Supervisor mode)
AArch32	SPSR_und	Saved Program Status Register (Undefined mode)
AArch64	ELR_EL1	Exception Link Register (EL1)
AArch64	ELR_EL2	Exception Link Register (EL2)
AArch64	ELR_EL3	Exception Link Register (EL3)
AArch64	SPSR_EL1	Saved Program Status Register (EL1)
AArch64	SPSR_EL2	Saved Program Status Register (EL2)
AArch64	SPSR_EL3	Saved Program Status Register (EL3)
AArch64	SPSR_abt	Saved Program Status Register (Abort mode)
AArch64	SPSR_fiq	Saved Program Status Register (FIQ mode)
AArch64	SPSR_irq	Saved Program Status Register (IRQ mode)
AArch64	SPSR_und	Saved Program Status Register (Undefined mode)
AArch64	SP_EL0	Stack Pointer (EL0)
AArch64	SP_EL1	Stack Pointer (EL1)
AArch64	SP_EL2	Stack Pointer (EL2)
AArch64	SP_EL3	Stack Pointer (EL3)

In the PSTATE functional group:

Exec state	Name	Description
AArch32	<u>APSR</u>	Application Program Status Register
AArch32	<u>CPSR</u>	Current Program Status Register
AArch64	<u>ALLINT</u>	All Interrupt Mask Bit
AArch64	<u>CurrentEL</u>	Current Exception Level
AArch64	<u>DAIF</u>	Interrupt Mask Bits
AArch64	<u>DIT</u>	Data Independent Timing
AArch64	<u>NZCV</u>	Condition Flags
AArch64	<u>PAN</u>	Privileged Access Never
AArch64	<u>PM</u>	PMU Exception Mask
AArch64	<u>SPSel</u>	Stack Pointer Select
AArch64	<u>SSBS</u>	Speculative Store Bypass Safe
AArch64	<u>SVCR</u>	Streaming Vector Control Register
AArch64	<u>TCO</u>	Tag Check Override
AArch64	<u>UAO</u>	User Access Override

In the Cache functional group:

Exec state	Name	Description
AArch32	<u>BPIALL</u>	Branch Predictor Invalidate All
AArch32	BPIALLIS	Branch Predictor Invalidate All, Inner Shareable
AArch32	<u>BPIMVA</u>	Branch Predictor Invalidate by VA
AArch32	<u>DCCIMVAC</u>	Data Cache line Clean and Invalidate by VA to PoC
AArch32	<u>DCCISW</u>	Data Cache line Clean and Invalidate by Set/Way
AArch32	<u>DCCMVAC</u>	Data Cache line Clean by VA to PoC
AArch32	<u>DCCMVAU</u>	Data Cache line Clean by VA to PoU
AArch32	<u>DCCSW</u>	Data Cache line Clean by Set/Way
AArch32	<u>DCIMVAC</u>	Data Cache line Invalidate by VA to PoC
AArch32	<u>DCISW</u>	Data Cache line Invalidate by Set/Way
AArch32	<u>ICIALLU</u>	Instruction Cache Invalidate All to PoU
AArch32	ICIALLUIS	Instruction Cache Invalidate All to PoU, Inner Shareable
AArch32	<u>ICIMVAU</u>	Instruction Cache line Invalidate by VA to PoU
AArch64	DC CGDSW	Clean of Data and Allocation Tags by Set/ Way
AArch64	DC CGDVAC	Clean of Data and Allocation Tags by VA to PoC
AArch64	DC CGDVADP	Clean of Data and Allocation Tags by VA to PoDP

Exec state	Name	Description
AArch64	DC CGDVAP	Clean of Data and Allocation Tags by VA to PoP
AArch64	DC CGSW	Clean of Allocation Tags by Set/Way
AArch64	DC CGVAC	Clean of Allocation Tags by VA to PoC
AArch64	DC CGVADP	Clean of Allocation Tags by VA to PoDP
AArch64	DC CGVAP	Clean of Allocation Tags by VA to PoP
AArch64	DC CIGDPAE	Clean and invalidate of data and allocation tags by PA to PoE
AArch64	<u>DC</u> CIGDPAPA	Clean and Invalidate of Data and Allocation Tags by PA to PoPA
AArch64	DC CIGDSW	Clean and Invalidate of Data and
AArch64	DC	Allocation Tags by Set/Way Clean and Invalidate of Data and
7 L H CHO4	CIGDVAC	Allocation Tags by VA to PoC
AArch64	DC CIGSW	Clean and Invalidate of Allocation Tags by Set/Way
AArch64	DC CIGVAC	Clean and Invalidate of Allocation Tags by VA to PoC
AArch64	DC CIPAE	Data or unified Cache line Clean and Invalidate by PA to PoE
AArch64	DC CIPAPA	Data or unified Cache line Clean and Invalidate by PA to PoPA
AArch64	DC CISW	Data or unified Cache line Clean and Invalidate by Set/Way
AArch64	DC CIVAC	Data or unified Cache line Clean and Invalidate by VA to PoC
AArch64	DC CSW	Data or unified Cache line Clean by Set/ Way
AArch64	DC CVAC	Data or unified Cache line Clean by VA to PoC
AArch64	DC CVADP	Data or unified Cache line Clean by VA to PoDP
AArch64	DC CVAP	Data or unified Cache line Clean by VA to PoP
AArch64	DC CVAU	Data or unified Cache line Clean by VA to PoU
AArch64	DC GVA	Data Cache set Allocation Tag by VA
AArch64	DC GZVA	Data Cache set Allocation Tags and Zero by VA
AArch64	DC IGDSW	Invalidate of Data and Allocation Tags by Set/Way
AArch64	DC IGDVAC	Invalidate of Data and Allocation Tags by VA to PoC
AArch64	DC IGSW	Invalidate of Allocation Tags by Set/Way

Exec state	Name	Description
AArch64	<u>DC IGVAC</u>	Invalidate of Allocation Tags by VA to PoC
AArch64	<u>DC ISW</u>	Data or unified Cache line Invalidate by Set/Way
AArch64	DC IVAC	Data or unified Cache line Invalidate by VA to PoC
AArch64	DC ZVA	Data Cache Zero by VA
AArch64	<u>IC IALLU</u>	Instruction Cache Invalidate All to PoU
AArch64	<u>IC IALLUIS</u>	Instruction Cache Invalidate All to PoU, Inner Shareable
AArch64	<u>IC IVAU</u>	Instruction Cache line Invalidate by VA to PoU

In the Address functional group:

Exec state	Name	Description
AArch32	ATS12NSOPR	Address Translate Stages 1 and 2 Non- secure Only PL1 Read
AArch32	ATS12NSOPW	Address Translate Stages 1 and 2 Non- secure Only PL1 Write
AArch32	ATS12NSOUR	Address Translate Stages 1 and 2 Non- secure Only Unprivileged Read
AArch32	ATS12NSOUW	Address Translate Stages 1 and 2 Non- secure Only Unprivileged Write
AArch32	ATS1CPR	Address Translate Stage 1 Current state PL1 Read
AArch32	ATS1CPRP	Address Translate Stage 1 Current state PL1 Read PAN
AArch32	ATS1CPW	Address Translate Stage 1 Current state PL1 Write
AArch32	ATS1CPWP	Address Translate Stage 1 Current state PL1 Write PAN
AArch32	ATS1CUR	Address Translate Stage 1 Current state Unprivileged Read
AArch32	ATS1CUW	Address Translate Stage 1 Current state Unprivileged Write
AArch32	ATS1HR	Address Translate Stage 1 Hyp mode Read
AArch32	ATS1HW	Address Translate Stage 1 Hyp mode Write
AArch32	<u>PAR</u>	Physical Address Register
AArch64	AT S12E0R	Address Translate Stages 1 and 2 EL0 Read
AArch64	AT S12E0W	Address Translate Stages 1 and 2 EL0 Write

Exec state	Name	Description
AArch64	AT S12E1R	Address Translate Stages 1 and 2 EL1 Read
AArch64	AT S12E1W	Address Translate Stages 1 and 2 EL1 Write
AArch64	AT S1E0R	Address Translate Stage 1 EL0 Read
AArch64	AT S1E0W	Address Translate Stage 1 EL0 Write
AArch64	AT S1E1R	Address Translate Stage 1 EL1 Read
AArch64	AT S1E1RP	Address Translate Stage 1 EL1 Read PAN
AArch64	AT S1E1W	Address Translate Stage 1 EL1 Write
AArch64	AT S1E1WP	Address Translate Stage 1 EL1 Write PAN
AArch64	AT S1E2R	Address Translate Stage 1 EL2 Read
AArch64	AT S1E2W	Address Translate Stage 1 EL2 Write
AArch64	AT S1E3R	Address Translate Stage 1 EL3 Read
AArch64	AT S1E3W	Address Translate Stage 1 EL3 Write
AArch64	PAR_EL1	Physical Address Register

In the TLB functional group:

Exec state	Name	Description
AArch32	<u>CFPRCTX</u>	Control Flow Prediction
		Restriction by Context
AArch32	COSPRCTX	Clear Oher Speculative
		Restriction by Context
AArch32	<u>CPPRCTX</u>	Cache Prefetch Prediction
		Restriction by Context
AArch32	<u>DTLBIALL</u>	Data TLB Invalidate All
AArch32	DTLBIASID	Data TLB Invalidate by ASID
		match
AArch32	<u>DTLBIMVA</u>	Data TLB Invalidate by VA
AArch32	<u>DVPRCTX</u>	Data Value Prediction
		Restriction by Context
AArch32	<u>ITLBIALL</u>	Instruction TLB Invalidate
		All
AArch32	<u>ITLBIASID</u>	Instruction TLB Invalidate
		by ASID match
AArch32	<u>ITLBIMVA</u>	Instruction TLB Invalidate
		by VA
AArch32	<u>TLBIALL</u>	TLB Invalidate All
AArch32	TLBIALLH	TLB Invalidate All, Hyp
		mode
AArch32	<u>TLBIALLHIS</u>	TLB Invalidate All, Hyp
		mode, Inner Shareable

Exec state	Name	Description
AArch32	TLBIALLIS	TLB Invalidate All, Inner Shareable
AArch32	TLBIALLNSNH	TLB Invalidate All, Non- Secure Non-Hyp
AArch32	TLBIALLNSNHIS	TLB Invalidate All, Non- Secure Non-Hyp, Inner Shareable
AArch32	TLBIASID	TLB Invalidate by ASID match
AArch32	TLBIASIDIS	TLB Invalidate by ASID match, Inner Shareable
AArch32	TLBIIPAS2	TLB Invalidate by Intermediate Physical Address, Stage 2
AArch32	TLBIIPAS2IS	TLB Invalidate by Intermediate Physical Address, Stage 2, Inner Shareable
AArch32	TLBIIPAS2L	TLB Invalidate by Intermediate Physical Address, Stage 2, Last level
AArch32	TLBIIPAS2LIS	TLB Invalidate by Intermediate Physical Address, Stage 2, Last level, Inner Shareable
AArch32	TLBIMVA	TLB Invalidate by VA
AArch32	TLBIMVAA	TLB Invalidate by VA, All ASID
AArch32	TLBIMVAAIS	TLB Invalidate by VA, All ASID, Inner Shareable
AArch32	TLBIMVAAL	TLB Invalidate by VA, All ASID, Last level
AArch32	<u>TLBIMVAALIS</u>	TLB Invalidate by VA, All ASID, Last level, Inner Shareable
AArch32	<u>TLBIMVAH</u>	TLB Invalidate by VA, Hyp mode
AArch32	TLBIMVAHIS	TLB Invalidate by VA, Hyp mode, Inner Shareable
AArch32	TLBIMVAIS	TLB Invalidate by VA, Inner Shareable
AArch32	TLBIMVAL	TLB Invalidate by VA, Last level
AArch32	<u>TLBIMVALH</u>	TLB Invalidate by VA, Last level, Hyp mode

Exec state	Name	Description
AArch32	TLBIMVALHIS	TLB Invalidate by VA, Last level, Hyp mode, Inner Shareable
AArch32	<u>TLBIMVALIS</u>	TLB Invalidate by VA, Last level, Inner Shareable
AArch64	TLBI ALLE1, TLBI ALLE1NXS	TLB Invalidate All, EL1
AArch64	TLBI ALLE1IS, TLBI ALLE1ISNXS	TLB Invalidate All, EL1, Inner Shareable
AArch64	TLBI ALLE1OS, TLBI ALLE1OSNXS	TLB Invalidate All, EL1, Outer Shareable
AArch64	TLBI ALLE2, TLBI ALLE2NXS	TLB Invalidate All, EL2
AArch64	TLBI ALLE2IS, TLBI ALLE2ISNXS	TLB Invalidate All, EL2, Inner Shareable
AArch64	TLBI ALLE2OS, TLBI ALLE2OSNXS	TLB Invalidate All, EL2, Outer Shareable
AArch64	TLBI ALLE3, TLBI ALLE3NXS	TLB Invalidate All, EL3
AArch64	TLBI ALLE3IS, TLBI ALLE3ISNXS	TLB Invalidate All, EL3, Inner Shareable
AArch64	TLBI ALLE3OS, TLBI ALLE3OSNXS	TLB Invalidate All, EL3, Outer Shareable
AArch64	TLBI ASIDE1, TLBI ASIDE1NXS	TLB Invalidate by ASID, EL1
AArch64	TLBI ASIDE1IS, TLBI ASIDE1ISNXS	TLB Invalidate by ASID, EL1, Inner Shareable
AArch64	TLBI ASIDE1OS, TLBI ASIDE1OSNXS	TLB Invalidate by ASID, EL1, Outer Shareable
AArch64	TLBI IPAS2E1, TLBI IPAS2E1NXS	TLB Invalidate by Intermediate Physical Address, Stage 2, EL1
AArch64	TLBI IPAS2E1IS, TLBI IPAS2E1ISNXS	TLB Invalidate by Intermediate Physical Address, Stage 2, EL1, Inner Shareable
AArch64	TLBI IPAS2E1OS, TLBI IPAS2E1OSNXS	TLB Invalidate by Intermediate Physical Address, Stage 2, EL1, Outer Shareable
AArch64	TLBI IPAS2LE1, TLBI IPAS2LE1NXS	TLB Invalidate by Intermediate Physical Address, Stage 2, Last level, EL1

Exec state	Name	Description
AArch64	TLBI IPAS2LE1IS, TLBI IPAS2LE1ISNXS	TLB Invalidate by Intermediate Physical Address, Stage 2, Last level, EL1, Inner Shareable
AArch64	TLBI IPAS2LE1OS, TLBI IPAS2LE1OSNXS	TLB Invalidate by Intermediate Physical Address, Stage 2, Last level, EL1, Outer Shareable
AArch64	TLBI PAALL	TLB Invalidate GPT Information by PA, All Entries, Local
AArch64	TLBI PAALLOS	TLB Invalidate GPT Information by PA, All Entries, Outer Shareable
AArch64	TLBI RIPAS2E1, TLBI RIPAS2E1NXS	TLB Range Invalidate by Intermediate Physical Address, Stage 2, EL1
AArch64	TLBI RIPAS2E1IS, TLBI RIPAS2E1ISNXS	TLB Range Invalidate by Intermediate Physical Address, Stage 2, EL1, Inner Shareable
AArch64	TLBI RIPAS2E1OS, TLBI RIPAS2E1OSNXS	TLB Range Invalidate by Intermediate Physical Address, Stage 2, EL1, Outer Shareable
AArch64	TLBI RIPAS2LE1, TLBI RIPAS2LE1NXS	TLB Range Invalidate by Intermediate Physical Address, Stage 2, Last level, EL1
AArch64	TLBI RIPAS2LE1IS, TLBI RIPAS2LE1ISNXS	TLB Range Invalidate by Intermediate Physical Address, Stage 2, Last level, EL1, Inner Shareable
AArch64	TLBI RIPAS2LE1OS, TLBI RIPAS2LE1OSNXS	TLB Range Invalidate by Intermediate Physical Address, Stage 2, Last level, EL1, Outer Shareable
AArch64	TLBI RPALOS	TLB Range Invalidate GPT Information by PA, Last level, Outer Shareable
AArch64	TLBI RPAOS	TLB Range Invalidate GPT Information by PA, Outer Shareable
AArch64	TLBI RVAAE1, TLBI RVAAE1NXS	TLB Range Invalidate by VA, All ASID, EL1

Exec state	Name	Description
AArch64	TLBI RVAAE1IS, TLBI RVAAE1ISNXS	TLB Range Invalidate by VA, All ASID, EL1, Inner Shareable
AArch64	TLBI RVAAE1OS, TLBI RVAAE1OSNXS	TLB Range Invalidate by VA, All ASID, EL1, Outer Shareable
AArch64	TLBI RVAALE1, TLBI RVAALE1NXS	TLB Range Invalidate by VA, All ASID, Last level, EL1
AArch64	TLBI RVAALE1IS, TLBI RVAALE1ISNXS	TLB Range Invalidate by VA, All ASID, Last Level, EL1, Inner Shareable
AArch64	TLBI RVAALE1OS, TLBI RVAALE1OSNXS	TLB Range Invalidate by VA, All ASID, Last Level, EL1, Outer Shareable
AArch64	TLBI RVAE1, TLBI RVAE1NXS	TLB Range Invalidate by VA, EL1
AArch64	TLBI RVAE1IS, TLBI RVAE1ISNXS	TLB Range Invalidate by VA, EL1, Inner Shareable
AArch64	TLBI RVAE1OS, TLBI RVAE1OSNXS	TLB Range Invalidate by VA, EL1, Outer Shareable
AArch64	TLBI RVAE2, TLBI RVAE2NXS	TLB Range Invalidate by VA, EL2
AArch64	TLBI RVAE2IS, TLBI RVAE2ISNXS	TLB Range Invalidate by VA, EL2, Inner Shareable
AArch64	TLBI RVAE2OS, TLBI RVAE2OSNXS	TLB Range Invalidate by VA, EL2, Outer Shareable
AArch64	TLBI RVAE3, TLBI RVAE3NXS	TLB Range Invalidate by VA, EL3
AArch64	TLBI RVAE3IS, TLBI RVAE3ISNXS	TLB Range Invalidate by VA, EL3, Inner Shareable
AArch64	TLBI RVAE3OS, TLBI RVAE3OSNXS	TLB Range Invalidate by VA, EL3, Outer Shareable
AArch64	TLBI RVALE1, TLBI RVALE1NXS	TLB Range Invalidate by VA, Last level, EL1
AArch64	TLBI RVALE1IS, TLBI RVALE1ISNXS	TLB Range Invalidate by VA, Last level, EL1, Inner Shareable
AArch64	TLBI RVALE1OS, TLBI RVALE1OSNXS	TLB Range Invalidate by VA, Last level, EL1, Outer Shareable
AArch64	TLBI RVALE2, TLBI RVALE2NXS	TLB Range Invalidate by VA, Last level, EL2
AArch64	TLBI RVALE2IS, TLBI RVALE2ISNXS	TLB Range Invalidate by VA, Last level, EL2, Inner Shareable

Exec state	Name	Description
AArch64	TLBI RVALE2OS, TLBI RVALE2OSNXS	TLB Range Invalidate by VA, Last level, EL2, Outer Shareable
AArch64	TLBI RVALE3, TLBI RVALE3NXS	TLB Range Invalidate by VA, Last level, EL3
AArch64	TLBI RVALE3IS, TLBI RVALE3ISNXS	TLB Range Invalidate by VA, Last level, EL3, Inner Shareable
AArch64	TLBI RVALE3OS, TLBI RVALE3OSNXS	TLB Range Invalidate by VA, Last level, EL3, Outer Shareable
AArch64	TLBI VAAE1, TLBI VAAE1NXS	TLB Invalidate by VA, All ASID, EL1
AArch64	TLBI VAAE1IS, TLBI VAAE1ISNXS	TLB Invalidate by VA, All ASID, EL1, Inner Shareable
AArch64	TLBI VAAE1OS, TLBI VAAE1OSNXS	TLB Invalidate by VA, All ASID, EL1, Outer Shareable
AArch64	TLBI VAALE1, TLBI VAALE1NXS	TLB Invalidate by VA, All ASID, Last level, EL1
AArch64	TLBI VAALE1IS, TLBI VAALE1ISNXS	TLB Invalidate by VA, All ASID, Last Level, EL1, Inner Shareable
AArch64	TLBI VAALE1OS, TLBI VAALE1OSNXS	TLB Invalidate by VA, All ASID, Last Level, EL1, Outer Shareable
AArch64	TLBI VAE1, TLBI VAE1NXS	TLB Invalidate by VA, EL1
AArch64	TLBI VAE1IS, TLBI VAE1ISNXS	TLB Invalidate by VA, EL1, Inner Shareable
AArch64	TLBI VAE1OS, TLBI VAE1OSNXS	TLB Invalidate by VA, EL1, Outer Shareable
AArch64	TLBI VAE2, TLBI VAE2NXS	TLB Invalidate by VA, EL2
AArch64	TLBI VAE2IS, TLBI VAE2ISNXS	TLB Invalidate by VA, EL2, Inner Shareable
AArch64	TLBI VAE2OS, TLBI VAE2OSNXS	TLB Invalidate by VA, EL2, Outer Shareable
AArch64	TLBI VAE3, TLBI VAE3NXS	TLB Invalidate by VA, EL3
AArch64	TLBI VAE3IS, TLBI VAE3ISNXS	TLB Invalidate by VA, EL3, Inner Shareable
AArch64	TLBI VAE3OS, TLBI VAE3OSNXS	TLB Invalidate by VA, EL3, Outer Shareable
AArch64	TLBI VALE1, TLBI VALE1NXS	TLB Invalidate by VA, Last level, EL1

Exec state	Name	Description
AArch64	TLBI VALE1IS, TLBI VALE1ISNXS	TLB Invalidate by VA, Last level, EL1, Inner Shareable
AArch64	TLBI VALE1OS, TLBI VALE1OSNXS	TLB Invalidate by VA, Last level, EL1, Outer Shareable
AArch64	TLBI VALE2, TLBI VALE2NXS	TLB Invalidate by VA, Last level, EL2
AArch64	TLBI VALE2IS, TLBI VALE2ISNXS	TLB Invalidate by VA, Last level, EL2, Inner Shareable
AArch64	TLBI VALE2OS, TLBI VALE2OSNXS	TLB Invalidate by VA, Last level, EL2, Outer Shareable
AArch64	TLBI VALE3, TLBI VALE3NXS	TLB Invalidate by VA, Last level, EL3
AArch64	TLBI VALE3IS, TLBI VALE3ISNXS	TLB Invalidate by VA, Last level, EL3, Inner Shareable
AArch64	TLBI VALE3OS, TLBI VALE3OSNXS	TLB Invalidate by VA, Last level, EL3, Outer Shareable
AArch64	TLBI VMALLE1, TLBI VMALLE1NXS	TLB Invalidate by VMID, All at stage 1, EL1
AArch64	TLBI VMALLE1IS, TLBI VMALLE1ISNXS	TLB Invalidate by VMID, All at stage 1, EL1, Inner Shareable
AArch64	TLBI VMALLE1OS, TLBI VMALLE1OSNXS	TLB Invalidate by VMID, All at stage 1, EL1, Outer Shareable
AArch64	TLBI VMALLS12E1, TLBI VMALLS12E1NXS	TLB Invalidate by VMID, All at Stage 1 and 2, EL1
AArch64	TLBI VMALLS12E1IS, TLBI VMALLS12E1ISNXS	TLB Invalidate by VMID, All at Stage 1 and 2, EL1, Inner Shareable
AArch64	TLBI VMALLS12E1OS, TLBI VMALLS12E1OSNXS	TLB Invalidate by VMID, All at Stage 1 and 2, EL1, Outer Shareable
AArch64	TLBIP IPAS2E1, TLBIP IPAS2E1NXS	TLB Invalidate Pair by Intermediate Physical Address, Stage 2, EL1
AArch64	TLBIP IPAS2E1IS, TLBIP IPAS2E1ISNXS	TLB Invalidate Pair by Intermediate Physical Address, Stage 2, EL1, Inner Shareable
AArch64	TLBIP IPAS2E1OS, TLBIP IPAS2E1OSNXS	TLB Invalidate Pair by Intermediate Physical Address, Stage 2, EL1, Outer Shareable
AArch64	TLBIP IPAS2LE1, TLBIP IPAS2LE1NXS	TLB Invalidate Pair by Intermediate Physical Address, Stage 2, Last level, EL1

Exec state	Name	Description
AArch64	TLBIP IPAS2LE1IS, TLBIP IPAS2LE1ISNXS	TLB Invalidate Pair by Intermediate Physical Address, Stage 2, Last level, EL1, Inner Shareable
AArch64	TLBIP IPAS2LE1OS, TLBIP IPAS2LE1OSNXS	TLB Invalidate Pair by Intermediate Physical Address, Stage 2, Last level, EL1, Outer Shareable
AArch64	TLBIP RIPAS2E1, TLBIP RIPAS2E1NXS	TLB Range Invalidate by Intermediate Physical Address, Stage 2, EL1
AArch64	TLBIP RIPAS2E1IS, TLBIP RIPAS2E1ISNXS	TLB Range Invalidate by Intermediate Physical Address, Stage 2, EL1, Inner Shareable
AArch64	TLBIP RIPAS2E1OS, TLBIP RIPAS2E1OSNXS	TLB Range Invalidate by Intermediate Physical Address, Stage 2, EL1, Outer Shareable
AArch64	TLBIP RIPAS2LE1, TLBIP RIPAS2LE1NXS	TLB Range Invalidate by Intermediate Physical Address, Stage 2, Last level, EL1
AArch64	TLBIP RIPAS2LE1IS, TLBIP RIPAS2LE1ISNXS	TLB Range Invalidate by Intermediate Physical Address, Stage 2, Last level, EL1, Inner Shareable
AArch64	TLBIP RIPAS2LE1OS, TLBIP RIPAS2LE1OSNXS	TLB Range Invalidate by Intermediate Physical Address, Stage 2, Last level, EL1, Outer Shareable
AArch64	TLBIP RVAAE1, TLBIP RVAAE1NXS	TLB Range Invalidate by VA, All ASID, EL1
AArch64	TLBIP RVAAE1IS, TLBIP RVAAE1ISNXS	TLB Range Invalidate by VA, All ASID, EL1, Inner Shareable
AArch64	TLBIP RVAAE1OS, TLBIP RVAAE1OSNXS	TLB Range Invalidate by VA, All ASID, EL1, Outer Shareable
AArch64	TLBIP RVAALE1, TLBIP RVAALE1NXS	TLB Range Invalidate by VA, All ASID, Last level, EL1
AArch64	TLBIP RVAALE1IS, TLBIP RVAALE1ISNXS	TLB Range Invalidate by VA, All ASID, Last Level, EL1, Inner Shareable
AArch64	TLBIP RVAALE1OS, TLBIP RVAALE1OSNXS	TLB Range Invalidate by VA, All ASID, Last Level, EL1, Outer Shareable

Exec state	Name	Description
AArch64	TLBIP RVAE1, TLBIP RVAE1NXS	TLB Range Invalidate by VA, EL1
AArch64	TLBIP RVAE1IS, TLBIP RVAE1ISNXS	TLB Range Invalidate by VA, EL1, Inner Shareable
AArch64	TLBIP RVAE1OS, TLBIP RVAE1OSNXS	TLB Range Invalidate by VA, EL1, Outer Shareable
AArch64	TLBIP RVAE2, TLBIP RVAE2NXS	TLB Range Invalidate by VA, EL2
AArch64	TLBIP RVAE2IS, TLBIP RVAE2ISNXS	TLB Range Invalidate by VA, EL2, Inner Shareable
AArch64	TLBIP RVAE2OS, TLBIP RVAE2OSNXS	TLB Range Invalidate by VA, EL2, Outer Shareable
AArch64	TLBIP RVAE3, TLBIP RVAE3NXS	TLB Range Invalidate by VA, EL3
AArch64	TLBIP RVAE3IS, TLBIP RVAE3ISNXS	TLB Range Invalidate by VA, EL3, Inner Shareable
AArch64	TLBIP RVAE3OS, TLBIP RVAE3OSNXS	TLB Range Invalidate by VA, EL3, Outer Shareable
AArch64	TLBIP RVALE1, TLBIP RVALE1NXS	TLB Range Invalidate by VA, Last level, EL1
AArch64	TLBIP RVALE1IS, TLBIP RVALE1ISNXS	TLB Range Invalidate by VA, Last level, EL1, Inner Shareable
AArch64	TLBIP RVALE1OS, TLBIP RVALE1OSNXS	TLB Range Invalidate by VA, Last level, EL1, Outer Shareable
AArch64	TLBIP RVALE2, TLBIP RVALE2NXS	TLB Range Invalidate by VA, Last level, EL2
AArch64	TLBIP RVALE2IS, TLBIP RVALE2ISNXS	TLB Range Invalidate by VA, Last level, EL2, Inner Shareable
AArch64	TLBIP RVALE2OS, TLBIP RVALE2OSNXS	TLB Range Invalidate by VA, Last level, EL2, Outer Shareable
AArch64	TLBIP RVALE3, TLBIP RVALE3NXS	TLB Range Invalidate by VA, Last level, EL3
AArch64	TLBIP RVALE3IS, TLBIP RVALE3ISNXS	TLB Range Invalidate by VA, Last level, EL3, Inner Shareable
AArch64	TLBIP RVALE3OS, TLBIP RVALE3OSNXS	TLB Range Invalidate by VA, Last level, EL3, Outer Shareable
AArch64	TLBIP VAAE1, TLBIP VAAE1NXS	TLB Invalidate Pair by VA, All ASID, EL1

Exec state	Name	Description
AArch64	TLBIP VAAE1IS, TLBIP VAAE1ISNXS	TLB Invalidate Pair by VA, All ASID, EL1, Inner Shareable
AArch64	TLBIP VAAE1OS, TLBIP VAAE1OSNXS	TLB Invalidate Pair by VA, All ASID, EL1, Outer Shareable
AArch64	TLBIP VAALE1, TLBIP VAALE1NXS	TLB Invalidate Pair by VA, All ASID, Last level, EL1
AArch64	TLBIP VAALE1IS, TLBIP VAALE1ISNXS	TLB Invalidate Pair by VA, All ASID, Last Level, EL1, Inner Shareable
AArch64	TLBIP VAALE1OS, TLBIP VAALE1OSNXS	TLB Invalidate Pair by VA, All ASID, Last Level, EL1, Outer Shareable
AArch64	TLBIP VAE1, TLBIP VAE1NXS	TLB Invalidate Pair by VA, EL1
AArch64	TLBIP VAE1IS, TLBIP VAE1ISNXS	TLB Invalidate Pair by VA, EL1, Inner Shareable
AArch64	TLBIP VAE1OS, TLBIP VAE1OSNXS	TLB Invalidate Pair by VA, EL1, Outer Shareable
AArch64	TLBIP VAE2, TLBIP VAE2NXS	TLB Invalidate Pair by VA, EL2
AArch64	TLBIP VAE2IS, TLBIP VAE2ISNXS	TLB Invalidate Pair by VA, EL2, Inner Shareable
AArch64	TLBIP VAE2OS, TLBIP VAE2OSNXS	TLB Invalidate Pair by VA, EL2, Outer Shareable
AArch64	TLBIP VAE3, TLBIP VAE3NXS	TLB Invalidate Pair by VA, EL3
AArch64	TLBIP VAE3IS, TLBIP VAE3ISNXS	TLB Invalidate Pair by VA, EL3, Inner Shareable
AArch64	TLBIP VAE3OS, TLBIP VAE3OSNXS	TLB Invalidate Pair by VA, EL3, Outer Shareable
AArch64	TLBIP VALE1, TLBIP VALE1NXS	TLB Invalidate Pair by VA, Last level, EL1
AArch64	TLBIP VALE1IS, TLBIP VALE1ISNXS	TLB Invalidate Pair by VA, Last level, EL1, Inner Shareable
AArch64	TLBIP VALE1OS, TLBIP VALE1OSNXS	TLB Invalidate Pair by VA, Last level, EL1, Outer Shareable
AArch64	TLBIP VALE2, TLBIP VALE2NXS	TLB Invalidate Pair by VA, Last level, EL2
AArch64	TLBIP VALE2IS, TLBIP VALE2ISNXS	TLB Invalidate Pair by VA, Last level, EL2, Inner Shareable

Exec state	Name	Description
AArch64	TLBIP VALE2OS, TLBIP VALE2OSNXS	TLB Invalidate Pair by VA, Last level, EL2, Outer Shareable
AArch64	TLBIP VALE3, TLBIP VALE3NXS	TLB Invalidate Pair by VA, Last level, EL3
AArch64	TLBIP VALE3IS, TLBIP VALE3ISNXS	TLB Invalidate Pair by VA, Last level, EL3, Inner Shareable
AArch64	TLBIP VALE3OS, TLBIP VALE3OSNXS	TLB Invalidate Pair by VA, Last level, EL3, Outer Shareable

In the PMU functional group:

Exec state	Name	Description
AArch32	<u>PMCCFILTR</u>	Performance Monitors Cycle Count Filter Register
AArch32	<u>PMCCNTR</u>	Performance Monitors Cycle Count Register
AArch32	PMCEID0	Performance Monitors Common Event Identification register 0
AArch32	PMCEID1	Performance Monitors Common Event Identification register 1
AArch32	PMCEID2	Performance Monitors Common Event Identification register 2
AArch32	PMCEID3	Performance Monitors Common Event Identification register 3
AArch32	<u>PMCNTENCLR</u>	Performance Monitors Count Enable Clear register
AArch32	<u>PMCNTENSET</u>	Performance Monitors Count Enable Set register
AArch32	<u>PMCR</u>	Performance Monitors Control Register
AArch32	PMEVCNTR <n></n>	Performance Monitors Event Count Registers
AArch32	PMEVTYPER <n></n>	Performance Monitors Event Type Registers
AArch32	PMINTENCLR	Performance Monitors Interrupt Enable Clear register
AArch32	<u>PMINTENSET</u>	Performance Monitors Interrupt Enable Set register

Exec state	Name	Description
AArch32	<u>PMMIR</u>	Performance Monitors Machine Identification Register
AArch32	<u>PMOVSR</u>	Performance Monitors Overflow Flag Status Register
AArch32	<u>PMOVSSET</u>	Performance Monitors Overflow Flag Status Set register
AArch32	<u>PMSELR</u>	Performance Monitors Event Counter Selection Register
AArch32	<u>PMSWINC</u>	Performance Monitors Software Increment register
AArch32	<u>PMUSERENR</u>	Performance Monitors User Enable Register
AArch32	<u>PMXEVCNTR</u>	Performance Monitors Selected Event Count Register
AArch32	<u>PMXEVTYPER</u>	Performance Monitors Selected Event Type Register
AArch64	PMCCFILTR_EL0	Performance Monitors Cycle Count Filter Register
AArch64	PMCCNTR_EL0	Performance Monitors Cycle Count Register
AArch64	PMCCNTSVR_EL1	Performance Monitors Cycle Count Saved Value Register
AArch64	PMCEID0_EL0	Performance Monitors Common Event Identification Register 0
AArch64	PMCEID1_EL0	Performance Monitors Common Event Identification Register 1
AArch64	PMCNTENCLR_EL0	Performance Monitors Count Enable Clear Register
AArch64	PMCNTENSET_EL0	Performance Monitors Count Enable Set Register
AArch64	PMCR_EL0	Performance Monitors Control Register
AArch64	PMEVCNTR <n>_EL0</n>	Performance Monitors Event Count Registers
AArch64	PMEVCNTSVR <n>_EL1</n>	Performance Monitors Event Count Saved Value Register <n></n>
AArch64	PMEVTYPER <n>_EL0</n>	Performance Monitors Event Type Registers
AArch64	PMICFILTR_EL0	Performance Monitors Instruction Counter Filter Register

Exec state	Name	Description
AArch64	PMICNTR_EL0	Performance Monitors Instruction Counter Register
AArch64	PMINTENCLR_EL1	Performance Monitors Interrupt Enable Clear Register
AArch64	PMINTENSET_EL1	Performance Monitors Interrupt Enable Set Register
AArch64	PMMIR_EL1	Performance Monitors Machine Identification Register
AArch64	PMOVSCLR_EL0	Performance Monitors Overflow Flag Status Clear Register
AArch64	PMOVSSET_EL0	Performance Monitors Overflow Flag Status Set Register
AArch64	PMSELR_EL0	Performance Monitors Event Counter Selection Register
AArch64	PMSWINC_EL0	Performance Monitors Software Increment Register
AArch64	PMUACR_EL1	Performance Monitors User Access Control Register
AArch64	PMUSERENR_EL0	Performance Monitors User Enable Register
AArch64	PMXEVCNTR_EL0	Performance Monitors Selected Event Count Register
AArch64	PMXEVTYPER_EL0	Performance Monitors Selected Event Type Register
AArch64	PMZR_EL0	Performance Monitors Zero with Mask
External	<u>PMAUTHSTATUS</u>	Performance Monitors Authentication Status register
External	PMCCFILTR_EL0	Performance Monitors Cycle Counter Filter Register
External	PMCCIDSR	CONTEXTIDR_ELx Sample Register
External	PMCCNTR_EL0	Performance Monitors Cycle Counter
External	PMCCNTSVR_EL1	Performance Monitors Cycle Count Saved Value Register
External	PMCEID0	Performance Monitors Common Event Identification register 0
External	PMCEID1	Performance Monitors Common Event Identification register 1

Exec state	Name	Description
External	PMCEID2	Performance Monitors Common Event Identification register 2
External	PMCEID3	Performance Monitors Common Event Identification register 3
External	<u>PMCFGR</u>	Performance Monitors Configuration Register
External	PMCGCR0	Counter Group Configuration Register 0
External	PMCID1SR	CONTEXTIDR_EL1 Sample Register
External	PMCID2SR	CONTEXTIDR_EL2 Sample Register
External	PMCIDR0	Performance Monitors Component Identification Register 0
External	PMCIDR1	Performance Monitors Component Identification Register 1
External	PMCIDR2	Performance Monitors Component Identification Register 2
External	PMCIDR3	Performance Monitors Component Identification Register 3
External	<u>PMCNTEN</u>	Performance Monitors Count Enable register
External	PMCNTENCLR_EL0	Performance Monitors Count Enable Clear Register
External	PMCNTENSET_EL0	Performance Monitors Count Enable Set Register
External	PMCR_EL0	Performance Monitors Control Register
External	<u>PMDEVAFF</u>	Performance Monitors Device Affinity register
External	PMDEVAFF0	Performance Monitors Device Affinity register 0
External	PMDEVAFF1	Performance Monitors Device Affinity register 1
External	<u>PMDEVARCH</u>	Performance Monitors Device Architecture register
External	<u>PMDEVID</u>	Performance Monitors Device ID register
External	<u>PMDEVTYPE</u>	Performance Monitors Device Type register

Exec state	Name	Description
External	PMEVCNTR <n>_EL0</n>	Performance Monitors Event Count Registers
External	PMEVCNTSVR <n>_EL1</n>	Performance Monitors Event Count Saved Value Register <n></n>
External	PMEVFILT2R <n></n>	Performance Monitors Event Filter Registers
External	PMEVTYPER <n>_EL0</n>	Performance Monitors Event Type Registers
External	PMICFILTR_EL0	Performance Monitors Instruction Counter Filter Register
External	PMICNTR_EL0	Performance Monitors Instruction Counter Register
External	PMICNTSVR_EL1	Performance Monitors Instruction Count Saved Value Register
External	<u>PMIIDR</u>	Performance Monitors Implementation Identification Register
External	<u>PMINTEN</u>	Performance Monitors Interrupt Enable register
External	PMINTENCLR_EL1	Performance Monitors Interrupt Enable Clear Register
External	PMINTENSET_EL1	Performance Monitors Interrupt Enable Set Register
External	<u>PMITCTRL</u>	Performance Monitors Integration mode Control register
External	<u>PMLAR</u>	Performance Monitors Lock Access Register
External	<u>PMLSR</u>	Performance Monitors Lock Status Register
External	<u>PMMIR</u>	Performance Monitors Machine Identification Register
External	<u>PMOVS</u>	Performance Monitors Overflow Flag Status register
External	PMOVSCLR_EL0	Performance Monitors Overflow Flag Status Clear register
External	PMOVSSET_EL0	Performance Monitors Overflow Flag Status Set Register

Exec state	Name	Description
External	PMPCSCTL	PC Sample-based Profiling Control Register
External	<u>PMPCSR</u>	Program Counter Sample Register
External	PMPIDR0	Performance Monitors Peripheral Identification Register 0
External	PMPIDR1	Performance Monitors Peripheral Identification Register 1
External	PMPIDR2	Performance Monitors Peripheral Identification Register 2
External	PMPIDR3	Performance Monitors Peripheral Identification Register 3
External	PMPIDR4	Performance Monitors Peripheral Identification Register 4
External	PMSSCR_EL1	Performance Monitors Snapshot Status and Capture Register
External	PMSWINC_EL0	Performance Monitors Software Increment Register
External	PMVCIDSR	CONTEXTIDR_EL1 and VMID Sample Register
External	<u>PMVIDSR</u>	VMID Sample Register
External	PMZR_EL0	Performance Monitors Zero with Mask

In the Reset functional group:

Exec state	Name	Description
AArch32	<u>HRMR</u>	Hyp Reset Management Register
AArch32	<u>RMR</u>	Reset Management Register
AArch32	RVBAR	Reset Vector Base Address Register
AArch64	RMR_EL1	Reset Management Register (EL1)
AArch64	RMR_EL2	Reset Management Register (EL2)
AArch64	RMR_EL3	Reset Management Register (EL3)
AArch64	RVBAR_EL1	Reset Vector Base Address Register (if EL2 and EL3 not implemented)
AArch64	RVBAR_EL2	Reset Vector Base Address Register (if EL3 not implemented)
AArch64	RVBAR_EL3	Reset Vector Base Address Register (if EL3 implemented)

In the Thread functional group:

Exec state	Name	Description
AArch32	<u>HTPIDR</u>	Hyp Software Thread ID Register
AArch32	<u>TPIDRPRW</u>	PL1 Software Thread ID Register
AArch32	<u>TPIDRURO</u>	PLO Read-Only Software Thread ID Register
AArch32	TPIDRURW	PLO Read/Write Software Thread ID Register
AArch64	SCXTNUM_EL0	EL0 Read/Write Software Context Number
AArch64	SCXTNUM_EL1	EL1 Read/Write Software Context Number
AArch64	SCXTNUM_EL2	EL2 Read/Write Software Context Number
AArch64	SCXTNUM_EL3	EL3 Read/Write Software Context Number
AArch64	TPIDR2_EL0	EL0 Read/Write Software Thread ID Register 2
AArch64	TPIDRRO_EL0	EL0 Read-Only Software Thread ID Register
AArch64	TPIDR_EL0	EL0 Read/Write Software Thread ID Register
AArch64	TPIDR_EL1	EL1 Software Thread ID Register
AArch64	TPIDR_EL2	EL2 Software Thread ID Register
AArch64	TPIDR_EL3	EL3 Software Thread ID Register

In the IMP DEF functional group:

Exec	Nan	ne Description
state	Nun	bescription
AArch32	ACTLR	Auxiliary Control
		Register
AArch32	ACTLR2	Auxiliary Control
		Register 2
AArch32	<u>ADFSR</u>	Auxiliary Data Fault
		Status Register
AArch32	<u>AIDR</u>	Auxiliary ID
		Register
AArch32	<u>AIFSR</u>	Auxiliary Instruction
		Fault Status
		Register
AArch32	AMAIR0	Auxiliary Memory
		Attribute Indirection
		Register 0
	•	•

Exec state	Name	Description
AArch32	AMAIR1	Auxiliary Memory Attribute Indirection Register 1
AArch32	<u>HACTLR</u>	Hyp Auxiliary Control Register
AArch32	HACTLR2	Hyp Auxiliary Control Register 2
AArch32	<u>HADFSR</u>	Hyp Auxiliary Data Fault Status Register
AArch32	HAIFSR	Hyp Auxiliary Instruction Fault Status Register
AArch32	HAMAIR0	Hyp Auxiliary Memory Attribute Indirection Register 0
AArch32	HAMAIR1	Hyp Auxiliary Memory Attribute Indirection Register 1
AArch64	ACTLR_EL1	Auxiliary Control Register (EL1)
AArch64	ACTLR_EL2	Auxiliary Control Register (EL2)
AArch64	ACTLR_EL3	Auxiliary Control Register (EL3)
AArch64	AFSR0_EL1	Auxiliary Fault Status Register 0 (EL1)
AArch64	AFSR0_EL2	Auxiliary Fault Status Register 0 (EL2)
AArch64	AFSR0_EL3	Auxiliary Fault Status Register 0 (EL3)
AArch64	AFSR1_EL1	Auxiliary Fault Status Register 1 (EL1)
AArch64	AFSR1_EL2	Auxiliary Fault Status Register 1 (EL2)
AArch64	AFSR1_EL3	Auxiliary Fault Status Register 1 (EL3)
AArch64	AIDR_EL1	Auxiliary ID Register

Exec state	Name	Description
AArch64	AMAIR_EL1	Auxiliary Memory Attribute Indirection Register (EL1)
AArch64	AMAIR_EL2	Auxiliary Memory Attribute Indirection Register (EL2)
AArch64	AMAIR_EL3	Auxiliary Memory Attribute Indirection Register (EL3)
AArch64	HACR_EL2	Hypervisor Auxiliary Control Register
AArch64	S3_ <op1>_<cn>_<cm>_<op2></op2></cm></cn></op1>	IMPLEMENTATION DEFINED registers
AArch64	SYS S1_ <op1>_<cn>_<cm>_<op2>, SYSL S1_<op1>_<cn>_<cm>_<op2>, SYSP S1_<op1> <cn>_<cm>_<op2>,</op2></cm></cn></op1></op2></cm></cn></op1></op2></cm></cn></op1>	IMPLEMENTATION DEFINED maintenance instructions

In the Timer functional group:

Exec state	Name	Description
AArch32	CNTFRQ	Counter-timer Frequency register
AArch32	CNTHPS_CTL	Counter-timer Secure Physical Timer Control Register (EL2)
AArch32	CNTHPS_CVAL	Counter-timer Secure Physical Timer CompareValue Register (EL2)
AArch32	CNTHPS_TVAL	Counter-timer Secure Physical Timer TimerValue Register (EL2)
AArch32	CNTHP_CTL	Counter-timer Hyp Physical Timer Control register
AArch32	CNTHVS_CTL	Counter-timer Secure Virtual Timer Control Register (EL2)
AArch32	CNTHVS_CVAL	Counter-timer Secure Virtual Timer CompareValue Register (EL2)
AArch32	CNTHVS_TVAL	Counter-timer Secure Virtual Timer TimerValue Register (EL2)
AArch32	CNTHV_CTL	Counter-timer Virtual Timer Control register (EL2)
AArch32	CNTHV_CVAL	Counter-timer Virtual Timer CompareValue register (EL2)
AArch32	CNTHV_TVAL	Counter-timer Virtual Timer TimerValue register (EL2)

Exec state	Name	Description
AArch32	<u>CNTKCTL</u>	Counter-timer Kernel Control register
AArch32	CNTPCT	Counter-timer Physical Count register
AArch32	<u>CNTPCTSS</u>	Counter-timer Self-Synchronized Physical Count register
AArch32	CNTP_CTL	Counter-timer Physical Timer Control register
AArch32	CNTP_CVAL	Counter-timer Physical Timer CompareValue register
AArch32	CNTP_TVAL	Counter-timer Physical Timer TimerValue register
AArch32	CNTVCT	Counter-timer Virtual Count register
AArch32	<u>CNTVCTSS</u>	Counter-timer Self-Synchronized Virtual Count register
AArch32	CNTV_CTL	Counter-timer Virtual Timer Control register
AArch32	CNTV_CVAL	Counter-timer Virtual Timer CompareValue register
AArch32	<u>CNTV_TVAL</u>	Counter-timer Virtual Timer TimerValue register
AArch64	CNTFRQ_EL0	Counter-timer Frequency register
AArch64	CNTHVS_CTL_EL2	Counter-timer Secure Virtual Timer Control register (EL2)
AArch64	CNTHVS_CVAL_EL2	Counter-timer Secure Virtual Timer CompareValue register (EL2)
AArch64	CNTHVS_TVAL_EL2	Counter-timer Secure Virtual Timer TimerValue register (EL2)
AArch64	CNTHV_CTL_EL2	Counter-timer Virtual Timer Control register (EL2)
AArch64	CNTHV_CVAL_EL2	Counter-timer Virtual Timer CompareValue register (EL2)
AArch64	CNTHV_TVAL_EL2	Counter-timer Virtual Timer TimerValue Register (EL2)
AArch64	CNTKCTL_EL1	Counter-timer Kernel Control Register
AArch64	CNTPCTSS_EL0	Counter-timer Self-Synchronized Physical Count Register
AArch64	CNTPCT_EL0	Counter-timer Physical Count Register
AArch64	CNTPOFF_EL2	Counter-timer Physical Offset Register
AArch64	CNTPS_CTL_EL1	Counter-timer Physical Secure Timer Control Register

Exec state	Name	Description
AArch64	CNTPS_CVAL_EL1	Counter-timer Physical Secure Timer CompareValue Register
AArch64	CNTPS_TVAL_EL1	Counter-timer Physical Secure Timer TimerValue register
AArch64	CNTP_CTL_EL0	Counter-timer Physical Timer Control Register
AArch64	CNTP_CVAL_EL0	Counter-timer Physical Timer CompareValue Register
AArch64	CNTP_TVAL_EL0	Counter-timer Physical Timer TimerValue Register
AArch64	CNTVCTSS_EL0	Counter-timer Self-Synchronized Virtual Count Register
AArch64	CNTVCT_EL0	Counter-timer Virtual Count Register
AArch64	CNTV_CTL_EL0	Counter-timer Virtual Timer Control Register
AArch64	CNTV_CVAL_EL0	Counter-timer Virtual Timer CompareValue Register
AArch64	CNTV_TVAL_EL0	Counter-timer Virtual Timer TimerValue Register
External	<u>CNTACR<n></n></u>	Counter-timer Access Control Registers
External	<u>CNTCR</u>	Counter Control Register
External	CNTCV	Counter Count Value register
External	CNTEL0ACR	Counter-timer EL0 Access Control Register
External	CNTFID0	Counter Frequency ID
External	CNTFID <n></n>	Counter Frequency IDs, n > 0
External	<u>CNTFRQ</u>	Counter-timer Frequency
External	CNTID	Counter Identification Register
External	CNTNSAR	Counter-timer Non-secure Access Register
External	<u>CNTPCT</u>	Counter-timer Physical Count
External	CNTP_CTL	Counter-timer Physical Timer Control
External	CNTP_CVAL	Counter-timer Physical Timer CompareValue
External	CNTP_TVAL	Counter-timer Physical Timer TimerValue
External	<u>CNTSCR</u>	Counter Scale Register
External	<u>CNTSR</u>	Counter Status Register
External	<u>CNTTIDR</u>	Counter-timer Timer ID Register
External	<u>CNTVCT</u>	Counter-timer Virtual Count
External	<u>CNTVOFF</u>	Counter-timer Virtual Offset
External	<u>CNTVOFF<n></n></u>	Counter-timer Virtual Offsets

Exec state	Name	Description
External	CNTV_CTL	Counter-timer Virtual Timer Control
External	CNTV_CVAL	Counter-timer Virtual Timer CompareValue
External	CNTV_TVAL	Counter-timer Virtual Timer TimerValue
External	CounterID <n></n>	Counter ID registers

In the Debug functional group:

Exec state	Name	Description
AArch32	DBGAUTHSTATUS	Debug Authentication Status register
AArch32	DBGBCR <n></n>	Debug Breakpoint Control Registers
AArch32	DBGBVR <n></n>	Debug Breakpoint Value Registers
AArch32	DBGBXVR <n></n>	Debug Breakpoint Extended Value Registers
AArch32	DBGCLAIMCLR	Debug CLAIM Tag Clear register
AArch32	DBGCLAIMSET	Debug CLAIM Tag Set register
AArch32	DBGDCCINT	DCC Interrupt Enable Register
AArch32	<u>DBGDEVID</u>	Debug Device ID register 0
AArch32	DBGDEVID1	Debug Device ID register 1
AArch32	DBGDEVID2	Debug Device ID register 2
AArch32	DBGDIDR	Debug ID Register
AArch32	<u>DBGDRAR</u>	Debug ROM Address Register
AArch32	DBGDSAR	Debug Self Address Register
AArch32	DBGDSCRext	Debug Status and Control Register, External View
AArch32	DBGDSCRint	Debug Status and Control Register, Internal View
AArch32	DBGDTRRXext	Debug OS Lock Data Transfer Register, Receive, External View
AArch32	DBGDTRRXint	Debug Data Transfer Register, Receive
AArch32	<u>DBGDTRTXext</u>	Debug OS Lock Data Transfer Register, Transmit
AArch32	<u>DBGDTRTXint</u>	Debug Data Transfer Register, Transmit
AArch32	DBGOSDLR	Debug OS Double Lock Register

Exec state	Name	Description
AArch32	DBGOSECCR	Debug OS Lock Exception Catch Control Register
AArch32	DBGOSLAR	Debug OS Lock Access Register
AArch32	DBGOSLSR	Debug OS Lock Status Register
AArch32	<u>DBGPRCR</u>	Debug Power Control Register
AArch32	<u>DBGVCR</u>	Debug Vector Catch Register
AArch32	DBGWCR <n></n>	Debug Watchpoint Control Registers
AArch32	<u>DBGWFAR</u>	Debug Watchpoint Fault Address Register
AArch32	DBGWVR <n></n>	Debug Watchpoint Value Registers
AArch32	TRFCR	Trace Filter Control Register
AArch64	DBGAUTHSTATUS_EL1	Debug Authentication Status Register
AArch64	DBGBCR <n>_EL1</n>	Debug Breakpoint Control Registers
AArch64	DBGBVR <n>_EL1</n>	Debug Breakpoint Value Registers
AArch64	DBGCLAIMCLR_EL1	Debug CLAIM Tag Clear Register
AArch64	DBGCLAIMSET_EL1	Debug CLAIM Tag Set Register
AArch64	DBGDTRRX_EL0	Debug Data Transfer Register, Receive
AArch64	DBGDTRTX_EL0	Debug Data Transfer Register, Transmit
AArch64	DBGDTR_EL0	Debug Data Transfer Register, half-duplex
AArch64	DBGPRCR_EL1	Debug Power Control Register
AArch64	DBGVCR32_EL2	Debug Vector Catch Register
AArch64	DBGWCR <n>_EL1</n>	Debug Watchpoint Control Registers
AArch64	DBGWVR <n>_EL1</n>	Debug Watchpoint Value Registers
AArch64	DLR_EL0	Debug Link Register
AArch64	DSPSR_EL0	Debug Saved Program Status Register
AArch64	MDCCINT_EL1	Monitor DCC Interrupt Enable Register
AArch64	MDCCSR_EL0	Monitor DCC Status Register
AArch64	MDRAR_EL1	Monitor Debug ROM Address Register
AArch64	MDSCR_EL1	Monitor Debug System Control Register

Exec state	Name	Description
AArch64	OSDLR_EL1	OS Double Lock Register
AArch64	OSDTRRX_EL1	OS Lock Data Transfer Register, Receive
AArch64	OSDTRTX_EL1	OS Lock Data Transfer Register, Transmit
AArch64	OSECCR_EL1	OS Lock Exception Catch Control Register
AArch64	OSLAR EL1	OS Lock Access Register
AArch64	OSLSR EL1	OS Lock Status Register
AArch64	TRFCR_EL1	Trace Filter Control Register (EL1)
AArch64	TRFCR_EL2	Trace Filter Control Register (EL2)
External	DBGAUTHSTATUS_EL1	Debug Authentication Status Register
External	DBGBCR <n>_EL1</n>	Debug Breakpoint Control Registers
External	DBGBVR <n>_EL1</n>	Debug Breakpoint Value Registers
External	DBGCLAIMCLR_EL1	Debug CLAIM Tag Clear Register
External	DBGCLAIMSET_EL1	Debug CLAIM Tag Set Register
External	DBGDTRRX_EL0	Debug Data Transfer Register, Receive
External	DBGDTRTX_EL0	Debug Data Transfer Register, Transmit
External	DBGWCR <n>_EL1</n>	Debug Watchpoint Control Registers
External	DBGWVR <n>_EL1</n>	Debug Watchpoint Value Registers
External	EDACR	External Debug Auxiliary Control Register
External	EDCIDR0	External Debug Component Identification Register 0
External	EDCIDR1	External Debug Component Identification Register 1
External	EDCIDR2	External Debug Component Identification Register 2
External	EDCIDR3	External Debug Component Identification Register 3
External	EDCIDSR	External Debug Context ID Sample Register
External	EDDEVAFF0	External Debug Device Affinity register 0
External	EDDEVAFF1	External Debug Device Affinity register 1

Exec state	Name	Description
External	<u>EDDEVARCH</u>	External Debug Device Architecture register
External	EDDEVID	External Debug Device ID register 0
External	EDDEVID1	External Debug Device ID register 1
External	EDDEVID2	External Debug Device ID register 2
External	EDDEVTYPE	External Debug Device Type register
External	EDDFR1	External Debug Feature Register 1
External	EDECCR	External Debug Exception Catch Control Register
External	EDECR	External Debug Execution Control Register
External	EDESR	External Debug Event Status Register
External	EDHSR	External Debug Halting Syndrome Register
External	EDITCTRL	External Debug Integration mode Control register
External	EDITR	External Debug Instruction Transfer Register
External	EDLAR	External Debug Lock Access Register
External	EDLSR	External Debug Lock Status Register
External	EDPCSR	External Debug Program Counter Sample Register
External	EDPIDR0	External Debug Peripheral Identification Register 0
External	EDPIDR1	External Debug Peripheral Identification Register 1
External	EDPIDR2	External Debug Peripheral Identification Register 2
External	EDPIDR3	External Debug Peripheral Identification Register 3
External	EDPIDR4	External Debug Peripheral Identification Register 4
External	<u>EDPRCR</u>	External Debug Power/Reset Control Register
External	<u>EDPRSR</u>	External Debug Processor Status Register
External	<u>EDRCR</u>	External Debug Reserve Control Register

Exec state	Name	Description
External	EDSCR	External Debug Status and Control Register
External	EDSCR2	External Debug Status and Control Register 2
External	<u>EDVIDSR</u>	External Debug Virtual Context Sample Register
External	EDWAR	External Debug Watchpoint Address Register
External	OSLAR_EL1	OS Lock Access Register

In the CTI functional group:

Exec state	Name	Description
External	ASICCTL	CTI External Multiplexer Control register
External	CTIAPPCLEAR	CTI Application Trigger Clear register
External	CTIAPPPULSE	CTI Application Pulse register
External	CTIAPPSET	CTI Application Trigger Set register
External	CTIAUTHSTATUS	CTI Authentication Status register
External	<u>CTICHINSTATUS</u>	CTI Channel In Status register
External	<u>CTICHOUTSTATUS</u>	CTI Channel Out Status register
External	CTICIDR0	CTI Component Identification Register 0
External	CTICIDR1	CTI Component Identification Register 1
External	CTICIDR2	CTI Component Identification Register 2
External	CTICIDR3	CTI Component Identification Register 3
External	CTICLAIMCLR	CTI CLAIM Tag Clear register
External	CTICLAIMSET	CTI CLAIM Tag Set register
External	CTICONTROL	CTI Control register
External	CTIDEVAFF0	CTI Device Affinity register 0
External	CTIDEVAFF1	CTI Device Affinity register 1
External	<u>CTIDEVARCH</u>	CTI Device Architecture register
External	<u>CTIDEVCTL</u>	CTI Device Control register
External	<u>CTIDEVID</u>	CTI Device ID register 0
External	CTIDEVID1	CTI Device ID register 1
External	CTIDEVID2	CTI Device ID register 2
External	<u>CTIDEVTYPE</u>	CTI Device Type register

Exec state	Name	Description
External	<u>CTIGATE</u>	CTI Channel Gate Enable register
External	CTIINEN <n></n>	CTI Input Trigger to Output Channel Enable registers
External	<u>CTIINTACK</u>	CTI Output Trigger Acknowledge register
External	CTIITCTRL	CTI Integration mode Control register
External	CTILAR	CTI Lock Access Register
External	CTILSR	CTI Lock Status Register
External	CTIOUTEN <n></n>	CTI Input Channel to Output Trigger Enable registers
External	CTIPIDR0	CTI Peripheral Identification Register 0
External	CTIPIDR1	CTI Peripheral Identification Register 1
External	CTIPIDR2	CTI Peripheral Identification Register 2
External	CTIPIDR3	CTI Peripheral Identification Register 3
External	CTIPIDR4	CTI Peripheral Identification Register 4
External	<u>CTITRIGINSTATUS</u>	CTI Trigger In Status register
External	<u>CTITRIGOUTSTATUS</u>	CTI Trigger Out Status register

In the Virt functional group:

AArch32 ATS1HR Address Translate Stage 1 Hyp mode Read AArch32 ATS1HW Address Translate Stage 1 Hyp mode Write AArch32 CNTHCTL Counter-timer Hyp Control register AArch32 CNTHP_CVAL Counter-timer Hyp Physical CompareValue register AArch32 CNTHP_TVAL Counter-timer Hyp Physical Timer TimerValue register AArch32 CNTVOFF Counter-timer Virtual Offset	Exec	Name	Description
AArch32 ATS1HW AArch32 CNTHCTL Counter-timer Hyp Control register AArch32 CNTHP_CVAL Counter-timer Hyp Physical CompareValue register AArch32 CNTHP_TVAL Counter-timer Hyp Physical Timer TimerValue register	state	Name	Description
AArch32 ATS1HW Address Translate Stage 1 Hyp mode Write Counter-timer Hyp Control register AArch32 CNTHP_CVAL Counter-timer Hyp Physical CompareValue register AArch32 CNTHP_TVAL Counter-timer Hyp Physical Timer TimerValue register	AArch32	ATS1HR	Address Translate Stage 1
AArch32 CNTHCTL Counter-timer Hyp Control register AArch32 CNTHP_CVAL Counter-timer Hyp Physical CompareValue register AArch32 CNTHP_TVAL Counter-timer Hyp Physical Timer TimerValue register			Hyp mode Read
AArch32 CNTHCTL Counter-timer Hyp Control register AArch32 CNTHP_CVAL Counter-timer Hyp Physical CompareValue register AArch32 CNTHP_TVAL Counter-timer Hyp Physical Timer TimerValue register	AArch32	<u>ATS1HW</u>	Address Translate Stage 1
AArch32 CNTHP_CVAL Counter-timer Hyp Physical CompareValue register AArch32 CNTHP_TVAL Counter-timer Hyp Physical Timer TimerValue register			Hyp mode Write
AArch32 CNTHP_CVAL Counter-timer Hyp Physical CompareValue register AArch32 CNTHP_TVAL Counter-timer Hyp Physical Timer TimerValue register	AArch32	<u>CNTHCTL</u>	Counter-timer Hyp Control
AArch32 CNTHP_TVAL Counter-timer Hyp Physical Timer TimerValue register			register
AArch32 CNTHP_TVAL Counter-timer Hyp Physical Timer TimerValue register	AArch32	CNTHP_CVAL	
Timer TimerValue register			CompareValue register
	AArch32	CNTHP_TVAL	Counter-timer Hyp Physical
AArch32 CNTVOFF Counter-timer Virtual Offset			Timer TimerValue register
	AArch32	<u>CNTVOFF</u>	Counter-timer Virtual Offset
register			register
AArch32 HACR Hyp Auxiliary Configuration	AArch32	<u>HACR</u>	Hyp Auxiliary Configuration
Register			Register
AArch32 HACTLR Hyp Auxiliary Control	AArch32	HACTLR	Hyp Auxiliary Control
Register			Register

Exec state	Name	Description
AArch32	HACTLR2	Hyp Auxiliary Control Register 2
AArch32	<u>HADFSR</u>	Hyp Auxiliary Data Fault Status Register
AArch32	<u>HAIFSR</u>	Hyp Auxiliary Instruction Fault Status Register
AArch32	HAMAIR0	Hyp Auxiliary Memory Attribute Indirection Register 0
AArch32	HAMAIR1	Hyp Auxiliary Memory Attribute Indirection Register 1
AArch32	<u>HCPTR</u>	Hyp Architectural Feature Trap Register
AArch32	<u>HCR</u>	Hyp Configuration Register
AArch32	HCR2	Hyp Configuration Register 2
AArch32	HDCR	Hyp Debug Control Register
AArch32	<u>HDFAR</u>	Hyp Data Fault Address Register
AArch32	HIFAR	Hyp Instruction Fault Address Register
AArch32	HMAIR0	Hyp Memory Attribute Indirection Register 0
AArch32	HMAIR1	Hyp Memory Attribute Indirection Register 1
AArch32	<u>HPFAR</u>	Hyp IPA Fault Address Register
AArch32	<u>HRMR</u>	Hyp Reset Management Register
AArch32	<u>HSCTLR</u>	Hyp System Control Register
AArch32	<u>HSR</u>	Hyp Syndrome Register
AArch32	<u>HSTR</u>	Hyp System Trap Register
AArch32	<u>HTCR</u>	Hyp Translation Control Register
AArch32	<u>HTPIDR</u>	Hyp Software Thread ID Register
AArch32	HTRFCR	Hyp Trace Filter Control Register
AArch32	<u>HTTBR</u>	Hyp Translation Table Base Register
AArch32	HVBAR	Hyp Vector Base Address Register
AArch32	ICC_HSRE	Interrupt Controller Hyp System Register Enable register

Exec state	Name	Description
AArch32	ICH_AP0R <n></n>	Interrupt Controller Hyp Active Priorities Group 0 Registers
AArch32	ICH_AP1R <n></n>	Interrupt Controller Hyp Active Priorities Group 1 Registers
AArch32	<u>ICH_EISR</u>	Interrupt Controller End of Interrupt Status Register
AArch32	ICH_ELRSR	Interrupt Controller Empty List Register Status Register
AArch32	<u>ICH_HCR</u>	Interrupt Controller Hyp Control Register
AArch32	ICH_LR <n></n>	Interrupt Controller List Registers
AArch32	ICH_LRC <n></n>	Interrupt Controller List Registers
AArch32	ICH_MISR	Interrupt Controller Maintenance Interrupt State Register
AArch32	ICH_VMCR	Interrupt Controller Virtual Machine Control Register
AArch32	ICH_VTR	Interrupt Controller VGIC Type Register
AArch32	TLBIALLH	TLB Invalidate All, Hyp mode
AArch32	TLBIALLHIS	TLB Invalidate All, Hyp mode, Inner Shareable
AArch32	TLBIIPAS2	TLB Invalidate by Intermediate Physical Address, Stage 2
AArch32	TLBIIPAS2IS	TLB Invalidate by Intermediate Physical Address, Stage 2, Inner Shareable
AArch32	TLBIIPAS2L	TLB Invalidate by Intermediate Physical Address, Stage 2, Last level
AArch32	TLBIIPAS2LIS	TLB Invalidate by Intermediate Physical Address, Stage 2, Last level, Inner Shareable
AArch32	TLBIMVAH	TLB Invalidate by VA, Hyp mode
AArch32	TLBIMVAHIS	TLB Invalidate by VA, Hyp mode, Inner Shareable
AArch32	<u>TLBIMVALH</u>	TLB Invalidate by VA, Last level, Hyp mode

Exec state	Name	Description
AArch32	TLBIMVALHIS	TLB Invalidate by VA, Last level, Hyp mode, Inner Shareable
AArch32	<u>VMPIDR</u>	Virtualization Multiprocessor ID Register
AArch32	VPIDR	Virtualization Processor ID Register
AArch32	VTCR	Virtualization Translation Control Register
AArch32	VTTBR	Virtualization Translation Table Base Register
AArch64	ACTLR_EL2	Auxiliary Control Register (EL2)
AArch64	AFSR0_EL2	Auxiliary Fault Status Register 0 (EL2)
AArch64	AFSR1_EL2	Auxiliary Fault Status Register 1 (EL2)
AArch64	AMAIR_EL2	Auxiliary Memory Attribute Indirection Register (EL2)
AArch64	CNTHCTL_EL2	Counter-timer Hypervisor Control register
AArch64	CNTHPS_CTL_EL2	Counter-timer Secure Physical Timer Control register (EL2)
AArch64	CNTHPS_CVAL_EL2	Counter-timer Secure Physical Timer CompareValue register (EL2)
AArch64	CNTHPS_TVAL_EL2	Counter-timer Secure Physical Timer TimerValue register (EL2)
AArch64	CNTHP_CTL_EL2	Counter-timer Hypervisor Physical Timer Control register
AArch64	CNTHP_CVAL_EL2	Counter-timer Physical Timer CompareValue register (EL2)
AArch64	CNTHP_TVAL_EL2	Counter-timer Physical Timer TimerValue register (EL2)
AArch64	CNTVOFF_EL2	Counter-timer Virtual Offset Register
AArch64	CPTR_EL2	Architectural Feature Trap Register (EL2)
AArch64	ESR_EL2	Exception Syndrome Register (EL2)
AArch64	FAR EL2	Fault Address Register (EL2)
AArch64	HACR_EL2	Hypervisor Auxiliary Control Register

Exec state	Name	Description
AArch64	HCRX_EL2	Extended Hypervisor
AArch64	HCR_EL2	Configuration Register Hypervisor Configuration Register
AArch64	HFGITR2_EL2	Hypervisor Fine-Grained Instruction Trap Register 2
AArch64	HPFAR_EL2	Hypervisor IPA Fault Address Register
AArch64	HSTR_EL2	Hypervisor System Trap Register
AArch64	ICC_SRE_EL2	Interrupt Controller System Register Enable Register (EL2)
AArch64	ICH_AP0R <n>_EL2</n>	Interrupt Controller Hyp Active Priorities Group 0 Registers
AArch64	ICH_AP1R <n>_EL2</n>	Interrupt Controller Hyp Active Priorities Group 1 Registers
AArch64	ICH_EISR_EL2	Interrupt Controller End of Interrupt Status Register
AArch64	ICH_ELRSR_EL2	Interrupt Controller Empty List Register Status Register
AArch64	ICH_HCR_EL2	Interrupt Controller Hyp Control Register
AArch64	ICH_LR <n>_EL2</n>	Interrupt Controller List Registers
AArch64	ICH_MISR_EL2	Interrupt Controller Maintenance Interrupt State Register
AArch64	ICH_VMCR_EL2	Interrupt Controller Virtual Machine Control Register
AArch64	ICH_VTR_EL2	Interrupt Controller VGIC Type Register
AArch64	MAIR_EL2	Memory Attribute Indirection Register (EL2)
AArch64	MDCR_EL2	Monitor Debug Configuration Register (EL2)
AArch64	RMR_EL2	Reset Management Register (EL2)
AArch64	SCTLR2_EL2	System Control Register (EL2)
AArch64	SCTLR_EL2	System Control Register (EL2)
AArch64	TCR2_EL2	Extended Translation Control Register (EL2)

Exec state	Name	Description
AArch64	TCR_EL2	Translation Control Register (EL2)
AArch64	TLBI IPAS2E1, TLBI IPAS2E1NXS	TLB Invalidate by Intermediate Physical Address, Stage 2, EL1
AArch64	TLBI IPAS2E1IS, TLBI IPAS2E1ISNXS	TLB Invalidate by Intermediate Physical Address, Stage 2, EL1, Inner Shareable
AArch64	TLBI IPAS2E1OS, TLBI IPAS2E1OSNXS	TLB Invalidate by Intermediate Physical Address, Stage 2, EL1, Outer Shareable
AArch64	TLBI IPAS2LE1, TLBI IPAS2LE1NXS	TLB Invalidate by Intermediate Physical Address, Stage 2, Last level, EL1
AArch64	TLBI IPAS2LE1IS, TLBI IPAS2LE1ISNXS	TLB Invalidate by Intermediate Physical Address, Stage 2, Last level, EL1, Inner Shareable
AArch64	TLBI IPAS2LE1OS, TLBI IPAS2LE1OSNXS	TLB Invalidate by Intermediate Physical Address, Stage 2, Last level, EL1, Outer Shareable
AArch64	TLBI RIPAS2E1, TLBI RIPAS2E1NXS	TLB Range Invalidate by Intermediate Physical Address, Stage 2, EL1
AArch64	TLBI RIPAS2E1IS, TLBI RIPAS2E1ISNXS	TLB Range Invalidate by Intermediate Physical Address, Stage 2, EL1, Inner Shareable
AArch64	TLBI RIPAS2E1OS, TLBI RIPAS2E1OSNXS	TLB Range Invalidate by Intermediate Physical Address, Stage 2, EL1, Outer Shareable
AArch64	TLBI RIPAS2LE1, TLBI RIPAS2LE1NXS	TLB Range Invalidate by Intermediate Physical Address, Stage 2, Last level, EL1
AArch64	TLBI RIPAS2LE1IS, TLBI RIPAS2LE1ISNXS	TLB Range Invalidate by Intermediate Physical Address, Stage 2, Last level, EL1, Inner Shareable

Exec state	Name	Description
AArch64	TLBI RIPAS2LE1OS, TLBI RIPAS2LE1OSNXS	TLB Range Invalidate by Intermediate Physical Address, Stage 2, Last level, EL1, Outer Shareable
AArch64	TLBIP IPAS2E1, TLBIP IPAS2E1NXS	TLB Invalidate Pair by Intermediate Physical Address, Stage 2, EL1
AArch64	TLBIP IPAS2E1IS, TLBIP IPAS2E1ISNXS	TLB Invalidate Pair by Intermediate Physical Address, Stage 2, EL1, Inner Shareable
AArch64	TLBIP IPAS2E1OS, TLBIP IPAS2E1OSNXS	TLB Invalidate Pair by Intermediate Physical Address, Stage 2, EL1, Outer Shareable
AArch64	TLBIP IPAS2LE1, TLBIP IPAS2LE1NXS	TLB Invalidate Pair by Intermediate Physical Address, Stage 2, Last level, EL1
AArch64	TLBIP IPAS2LE1IS, TLBIP IPAS2LE1ISNXS	TLB Invalidate Pair by Intermediate Physical Address, Stage 2, Last level, EL1, Inner Shareable
AArch64	TLBIP IPAS2LE1OS, TLBIP IPAS2LE1OSNXS	TLB Invalidate Pair by Intermediate Physical Address, Stage 2, Last level, EL1, Outer Shareable
AArch64	TLBIP RIPAS2E1, TLBIP RIPAS2E1NXS	TLB Range Invalidate by Intermediate Physical Address, Stage 2, EL1
AArch64	TLBIP RIPAS2E1IS, TLBIP RIPAS2E1ISNXS	TLB Range Invalidate by Intermediate Physical Address, Stage 2, EL1, Inner Shareable
AArch64	TLBIP RIPAS2E1OS, TLBIP RIPAS2E1OSNXS	TLB Range Invalidate by Intermediate Physical Address, Stage 2, EL1, Outer Shareable
AArch64	TLBIP RIPAS2LE1, TLBIP RIPAS2LE1NXS	TLB Range Invalidate by Intermediate Physical Address, Stage 2, Last level, EL1
AArch64	TLBIP RIPAS2LE1IS, TLBIP RIPAS2LE1ISNXS	TLB Range Invalidate by Intermediate Physical Address, Stage 2, Last level, EL1, Inner Shareable

Exec state	Name	Description
AArch64	TLBIP RIPAS2LE1OS, TLBIP RIPAS2LE1OSNXS	TLB Range Invalidate by Intermediate Physical Address, Stage 2, Last level, EL1, Outer Shareable
AArch64	TPIDR_EL2	EL2 Software Thread ID Register
AArch64	TTBR0_EL2	Translation Table Base Register 0 (EL2)
AArch64	TTBR1_EL2	Translation Table Base Register 1 (EL2)
AArch64	VBAR_EL2	Vector Base Address Register (EL2)
AArch64	VMPIDR_EL2	Virtualization Multiprocessor ID Register
AArch64	VPIDR_EL2	Virtualization Processor ID Register
AArch64	VTCR_EL2	Virtualization Translation Control Register
AArch64	VTTBR_EL2	Virtualization Translation Table Base Register

In the Secure functional group:

Exec state	Name	Description
AArch32	ICC_MCTLR	Interrupt Controller Monitor Control Register
AArch32	ICC_MSRE	Interrupt Controller Monitor System Register Enable register
AArch32	<u>MVBAR</u>	Monitor Vector Base Address Register
AArch32	<u>NSACR</u>	Non-Secure Access Control Register
AArch32	<u>SCR</u>	Secure Configuration Register
AArch32	<u>SDCR</u>	Secure Debug Control Register
AArch32	<u>SDER</u>	Secure Debug Enable Register
AArch64	ACTLR_EL3	Auxiliary Control Register (EL3)
AArch64	AFSR0_EL3	Auxiliary Fault Status Register 0 (EL3)
AArch64	AFSR1_EL3	Auxiliary Fault Status Register 1 (EL3)
AArch64	AMAIR_EL3	Auxiliary Memory Attribute Indirection Register (EL3)
AArch64	CPTR_EL3	Architectural Feature Trap Register (EL3)
AArch64	ICC_CTLR_EL3	Interrupt Controller Control Register (EL3)
AArch64	ICC_SRE_EL3	Interrupt Controller System Register Enable Register (EL3)

Exec state	Name	Description
AArch64	MDCR_EL3	Monitor Debug Configuration Register (EL3)
AArch64	SCR_EL3	Secure Configuration Register
AArch64	SDER32_EL3	AArch32 Secure Debug Enable Register
AArch64	VBAR_EL3	Vector Base Address Register (EL3)

In the Float functional group:

Exec state	Name	Description
AArch32	<u>FPEXC</u>	Floating-Point Exception Control register
AArch32	<u>FPSCR</u>	Floating-Point Status and Control Register
AArch32	<u>FPSID</u>	Floating-Point System ID register
AArch32	MVFR0	Media and VFP Feature Register 0
AArch32	MVFR1	Media and VFP Feature Register 1
AArch32	MVFR2	Media and VFP Feature Register 2
AArch64	<u>FPCR</u>	Floating-point Control Register
AArch64	FPEXC32_EL2	Floating-Point Exception Control Register
AArch64	<u>FPSR</u>	Floating-point Status Register
AArch64	MVFR0_EL1	AArch32 Media and VFP Feature Register 0
AArch64	MVFR1_EL1	AArch32 Media and VFP Feature Register 1
AArch64	MVFR2_EL1	AArch32 Media and VFP Feature Register 2

In the Legacy functional group:

Exec state	Name	Description
AArch32	CP15DMB	Data Memory Barrier System instruction
AArch32	<u>CP15DSB</u>	Data Synchronization Barrier System instruction
AArch32	CP15ISB	Instruction Synchronization Barrier System instruction
AArch32	<u>FCSEIDR</u>	FCSE Process ID register
AArch32	<u>JIDR</u>	Jazelle ID Register
AArch32	<u>JMCR</u>	Jazelle Main Configuration Register
AArch32	<u>JOSCR</u>	Jazelle OS Control Register

In the Trace functional group:

Exec state	Name	Description
AArch64	TRCACATR <n></n>	Address Comparator Access Type Register <n></n>
AArch64	TRCACVR <n></n>	Address Comparator Value Register <n></n>
AArch64	TRCAUXCTLR	Auxiliary Control Register
AArch64	TRCBBCTLR	Branch Broadcast Control Register
AArch64	TRCCCCTLR	Cycle Count Control Register
AArch64	TRCCIDCCTLR0	Context Identifier Comparator Control Register 0
AArch64	TRCCIDCCTLR1	Context Identifier Comparator Control Register 1
AArch64	TRCCIDCVR <n></n>	Context Identifier Comparator Value Registers <n></n>
AArch64	TRCCLAIMCLR	Claim Tag Clear Register
AArch64	TRCCLAIMSET	Claim Tag Set Register
AArch64	TRCCNTCTLR <n></n>	Counter Control Register <n></n>
AArch64	TRCCNTRLDVR <n></n>	Counter Reload Value Register <n></n>
AArch64	TRCCNTVR <n></n>	Counter Value Register <n></n>
AArch64	TRCCONFIGR	Trace Configuration Register
AArch64	TRCEVENTCTL0R	Event Control 0 Register
AArch64	TRCEVENTCTL1R	Event Control 1 Register
AArch64	TRCEXTINSELR <n></n>	External Input Select Register <n></n>
AArch64	TRCIDR0	ID Register 0
AArch64	TRCIDR1	ID Register 1
AArch64	TRCIDR10	ID Register 10
AArch64	TRCIDR11	ID Register 11
AArch64	TRCIDR12	ID Register 12
AArch64	TRCIDR13	ID Register 13
AArch64	TRCIDR2	ID Register 2
AArch64	TRCIDR3	ID Register 3
AArch64	TRCIDR4	ID Register 4
AArch64	TRCIDR5	ID Register 5
AArch64	TRCIDR6	ID Register 6
AArch64	TRCIDR7	ID Register 7
AArch64	TRCIDR8	ID Register 8
AArch64	TRCIDR9	ID Register 9
AArch64	TRCIMSPEC0	IMP DEF Register 0
AArch64	TRCIMSPEC <n></n>	IMP DEF Register <n></n>

Exec state	Name	Description
AArch64	TRCITECR_EL1	Instrumentation Trace Control Register (EL1)
AArch64	TRCITECR_EL2	Instrumentation Trace Control Register (EL2)
AArch64	TRCITEEDCR	Instrumentation Trace Extension External Debug Control Register
AArch64	TRCPRGCTLR	Programming Control Register
AArch64	TRCQCTLR	Q Element Control Register
AArch64	TRCRSCTLR <n></n>	Resource Selection Control Register <n></n>
AArch64	TRCRSR	Resources Status Register
AArch64	TRCSEQEVR <n></n>	Sequencer State Transition Control Register <n></n>
AArch64	TRCSEQRSTEVR	Sequencer Reset Control Register
AArch64	TRCSEQSTR	Sequencer State Register
AArch64	TRCSSCCR <n></n>	Single-shot Comparator Control Register <n></n>
AArch64	TRCSSCSR <n></n>	Single-shot Comparator Control Status Register <n></n>
AArch64	TRCSSPCICR <n></n>	Single-shot Processing Element Comparator Input Control Register <n></n>
AArch64	TRCSTALLCTLR	Stall Control Register
AArch64	TRCSTATR	Trace Status Register
AArch64	TRCSYNCPR	Synchronization Period Register
AArch64	TRCTRACEIDR	Trace ID Register
AArch64	TRCTSCTLR	Timestamp Control Register
AArch64	TRCVICTLR	ViewInst Main Control Register
AArch64	TRCVIIECTLR	ViewInst Include/Exclude Control Register
AArch64	TRCVIPCSSCTLR	ViewInst Start/Stop PE Comparator Control Register
AArch64	TRCVISSCTLR	ViewInst Start/Stop Control Register
AArch64	TRCVMIDCCTLR0	Virtual Context Identifier Comparator Control Register 0
AArch64	TRCVMIDCCTLR1	Virtual Context Identifier Comparator Control Register 1
AArch64	TRCVMIDCVR <n></n>	Virtual Context Identifier Comparator Value Register <n></n>
External	TRCACATR <n></n>	Address Comparator Access Type Register <n></n>
External	TRCACVR <n></n>	Address Comparator Value Register <n></n>
External	TRCAUXCTLR	Auxiliary Control Register

Exec state	Name	Description
External	TRCBBCTLR	Branch Broadcast Control Register
External	TRCCCCTLR	Cycle Count Control Register
External	TRCCIDCCTLR0	Context Identifier Comparator Control Register 0
External	TRCCIDCCTLR1	Context Identifier Comparator Control Register 1
External	TRCCIDCVR <n></n>	Context Identifier Comparator Value Registers <n></n>
External	TRCCLAIMCLR	Claim Tag Clear Register
External	TRCCLAIMSET	Claim Tag Set Register
External	TRCCNTCTLR <n></n>	Counter Control Register <n></n>
External	TRCCNTRLDVR <n></n>	Counter Reload Value Register <n></n>
External	TRCCNTVR <n></n>	Counter Value Register <n></n>
External	TRCCONFIGR	Trace Configuration Register
External	TRCEVENTCTL0R	Event Control 0 Register
External	TRCEVENTCTL1R	Event Control 1 Register
External	TRCEXTINSELR <n></n>	External Input Select Register <n></n>
External	TRCIDR0	ID Register 0
External	TRCIDR1	ID Register 1
External	TRCIDR10	ID Register 10
External	TRCIDR11	ID Register 11
External	TRCIDR12	ID Register 12
External	TRCIDR13	ID Register 13
External	TRCIDR2	ID Register 2
External	TRCIDR3	ID Register 3
External	TRCIDR4	ID Register 4
External	TRCIDR5	ID Register 5
External	TRCIDR6	ID Register 6
External	TRCIDR7	ID Register 7
External	TRCIDR8	ID Register 8
External	TRCIDR9	ID Register 9
External	TRCIMSPEC0	IMP DEF Register 0
External	TRCIMSPEC <n></n>	IMP DEF Register <n></n>
External	TRCITEEDCR	Instrumentation Trace Extension External Debug Control Register
External	TRCPRGCTLR	Programming Control Register
External	TRCQCTLR	Q Element Control Register
External	TRCRSCTLR <n></n>	Resource Selection Control Register <n></n>
External	TRCRSR	Resources Status Register
		1

Exec state	Name	Description
External	TRCSEQEVR <n></n>	Sequencer State Transition Control Register <n></n>
External	TRCSEQRSTEVR	Sequencer Reset Control Register
External	TRCSEQSTR	Sequencer State Register
External	TRCSSCCR <n></n>	Single-shot Comparator Control Register <n></n>
External	TRCSSCSR <n></n>	Single-shot Comparator Control Status Register <n></n>
External	TRCSSPCICR <n></n>	Single-shot Processing Element Comparator Input Control Register <n></n>
External	TRCSTALLCTLR	Stall Control Register
External	TRCSTATR	Trace Status Register
External	TRCSYNCPR	Synchronization Period Register
External	TRCTRACEIDR	Trace ID Register
External	TRCTSCTLR	Timestamp Control Register
External	TRCVICTLR	ViewInst Main Control Register
External	TRCVIIECTLR	ViewInst Include/Exclude Control Register
External	TRCVIPCSSCTLR	ViewInst Start/Stop PE Comparator Control Register
External	TRCVISSCTLR	ViewInst Start/Stop Control Register
External	TRCVMIDCCTLR0	Virtual Context Identifier Comparator Control Register 0
External	TRCVMIDCCTLR1	Virtual Context Identifier Comparator Control Register 1
External	TRCVMIDCVR <n></n>	Virtual Context Identifier Comparator Value Register <n></n>

In the Trace management functional group:

Exec state	Name	Description
AArch64	<u>TRCAUTHSTATUS</u>	Authentication Status Register
AArch64	<u>TRCDEVARCH</u>	Device Architecture Register
AArch64	TRCDEVID	Device Configuration Register
AArch64	TRCOSLSR	Trace OS Lock Status Register
External	<u>TRCAUTHSTATUS</u>	Authentication Status Register
External	TRCCIDR0	Component Identification Register 0
External	TRCCIDR1	Component Identification Register 1
External	TRCCIDR2	Component Identification Register 2

Exec state	Name	Description
External	TRCCIDR3	Component Identification Register 3
External	TRCDEVAFF	Device Affinity Register
External	<u>TRCDEVARCH</u>	Device Architecture Register
External	TRCDEVID	Device Configuration Register
External	TRCDEVID1	Device Configuration Register 1
External	TRCDEVID2	Device Configuration Register 2
External	TRCDEVTYPE	Device Type Register
External	TRCITCTRL	Integration Mode Control Register
External	TRCLAR	Lock Access Register
External	TRCLSR	Lock Status Register
External	TRCOSLSR	Trace OS Lock Status Register
External	TRCPDCR	PowerDown Control Register
External	TRCPDSR	PowerDown Status Register
External	TRCPIDR0	Peripheral Identification Register 0
External	TRCPIDR1	Peripheral Identification Register 1
External	TRCPIDR2	Peripheral Identification Register 2
External	TRCPIDR3	Peripheral Identification Register 3
External	TRCPIDR4	Peripheral Identification Register 4
External	TRCPIDR5	Peripheral Identification Register 5
External	TRCPIDR6	Peripheral Identification Register 6
External	TRCPIDR7	Peripheral Identification Register 7

In the TRBE functional group:

Exec state	Name	Description
AArch64	TRBBASER_EL1	Trace Buffer Base Address Register
AArch64	TRBIDR_EL1	Trace Buffer ID Register
AArch64	TRBLIMITR_EL1	Trace Buffer Limit Address
		Register
AArch64	TRBMAR EL1	Trace Buffer Memory Attribute
		Register
AArch64	TRBMPAM_EL1	Trace Buffer MPAM Configuration
		Register
AArch64	TRBPTR_EL1	Trace Buffer Write Pointer Register
AArch64	TRBSR_EL1	Trace Buffer Status/syndrome
		Register
AArch64	TRBTRG_EL1	Trace Buffer Trigger Counter
		Register
External	<u>TRBAUTHSTATUS</u>	Authentication Status Register
External	TRBBASER_EL1	Trace Buffer Base Address Register
External	TRBCIDR0	Component Identification Register
		0

Exec state	Name	Description
External	TRBCIDR1	Component Identification Register 1
External	TRBCIDR2	Component Identification Register 2
External	TRBCIDR3	Component Identification Register 3
External	<u>TRBCR</u>	Trace Buffer Control Register
External	<u>TRBDEVAFF</u>	Device Affinity Register
External	TRBDEVARCH	Trace Buffer Device Architecture Register
External	<u>TRBDEVID</u>	Device Configuration Register
External	TRBDEVID1	Device Configuration Register 1
External	TRBDEVID2	Device Configuration Register 2
External	<u>TRBDEVTYPE</u>	Device Type Register
External	TRBIDR_EL1	Trace Buffer ID Register
External	<u>TRBITCTRL</u>	Integration Mode Control Register
External	<u>TRBLAR</u>	Lock Access Register
External	TRBLIMITR_EL1	Trace Buffer Limit Address Register
External	TRBLSR	Lock Status Register
External	TRBMAR_EL1	Trace Buffer Memory Attribute Register
External	TRBMPAM_EL1	Trace Buffer MPAM Configuration Register
External	TRBPIDR0	Peripheral Identification Register 0
External	TRBPIDR1	Peripheral Identification Register 1
External	TRBPIDR2	Peripheral Identification Register 2
External	TRBPIDR3	Peripheral Identification Register 3
External	TRBPIDR4	Peripheral Identification Register 4
External	TRBPIDR5	Peripheral Identification Register 5
External	TRBPIDR6	Peripheral Identification Register 6
External	TRBPIDR7	Peripheral Identification Register 7
External	TRBPTR_EL1	Trace Buffer Write Pointer Register
External	TRBSR_EL1	Trace Buffer Status/syndrome Register
External	TRBTRG_EL1	Trace Buffer Trigger Counter Register

In the GIC functional group:

Exec state	Name	Description
AArch32	ICC_AP0R <n></n>	Interrupt Controller Active Priorities Group 0 Registers

Exec state	Name	Description
AArch32	ICC_AP1R <n></n>	Interrupt Controller Active Priorities Group 1 Registers
AArch32	ICC_ASGI1R	Interrupt Controller Alias Software Generated Interrupt Group 1 Register
AArch32	ICC_BPR0	Interrupt Controller Binary Point Register 0
AArch32	ICC_BPR1	Interrupt Controller Binary Point Register 1
AArch32	ICC_CTLR	Interrupt Controller Control Register
AArch32	ICC_DIR	Interrupt Controller Deactivate Interrupt Register
AArch32	ICC_EOIR0	Interrupt Controller End Of Interrupt Register 0
AArch32	ICC_EOIR1	Interrupt Controller End Of Interrupt Register 1
AArch32	ICC_HPPIR0	Interrupt Controller Highest Priority Pending Interrupt Register 0
AArch32	ICC_HPPIR1	Interrupt Controller Highest Priority Pending Interrupt Register 1
AArch32	ICC_HSRE	Interrupt Controller Hyp System Register Enable register
AArch32	ICC_IAR0	Interrupt Controller Interrupt Acknowledge Register 0
AArch32	ICC_IAR1	Interrupt Controller Interrupt Acknowledge Register 1
AArch32	ICC_IGRPEN0	Interrupt Controller Interrupt Group 0 Enable register
AArch32	ICC_IGRPEN1	Interrupt Controller Interrupt Group 1 Enable register
AArch32	ICC_MCTLR	Interrupt Controller Monitor Control Register
AArch32	ICC_MGRPEN1	Interrupt Controller Monitor Interrupt Group 1 Enable register
AArch32	ICC_MSRE	Interrupt Controller Monitor System Register Enable register
AArch32	ICC_PMR	Interrupt Controller Interrupt Priority Mask Register
AArch32	ICC_RPR	Interrupt Controller Running Priority Register
AArch32	ICC_SGI0R	Interrupt Controller Software Generated Interrupt Group 0 Register

Exec state	Name	Description
AArch32	ICC_SGI1R	Interrupt Controller Software Generated Interrupt Group 1 Register
AArch32	ICC_SRE	Interrupt Controller System Register Enable register
AArch32	ICH_APOR <n></n>	Interrupt Controller Hyp Active Priorities Group 0 Registers
AArch32	ICH_AP1R <n></n>	Interrupt Controller Hyp Active Priorities Group 1 Registers
AArch32	ICH_EISR	Interrupt Controller End of Interrupt Status Register
AArch32	ICH_ELRSR	Interrupt Controller Empty List Register Status Register
AArch32	ICH_HCR	Interrupt Controller Hyp Control Register
AArch32	ICH_LR <n></n>	Interrupt Controller List Registers
AArch32	ICH_LRC <n></n>	Interrupt Controller List Registers
AArch32	ICH_MISR	Interrupt Controller Maintenance Interrupt State Register
AArch32	ICH_VMCR	Interrupt Controller Virtual Machine Control Register
AArch32	ICH_VTR	Interrupt Controller VGIC Type Register
AArch32	ICV_AP0R <n></n>	Interrupt Controller Virtual Active Priorities Group 0 Registers
AArch32	ICV_AP1R <n></n>	Interrupt Controller Virtual Active Priorities Group 1 Registers
AArch32	ICV_BPR0	Interrupt Controller Virtual Binary Point Register 0
AArch32	ICV_BPR1	Interrupt Controller Virtual Binary Point Register 1
AArch32	ICV_CTLR	Interrupt Controller Virtual Control Register
AArch32	ICV_DIR	Interrupt Controller Deactivate Virtual Interrupt Register
AArch32	ICV_EOIR0	Interrupt Controller Virtual End Of Interrupt Register 0
AArch32	ICV_EOIR1	Interrupt Controller Virtual End Of Interrupt Register 1
AArch32	ICV_HPPIR0	Interrupt Controller Virtual Highest Priority Pending Interrupt Register 0
AArch32	ICV_HPPIR1	Interrupt Controller Virtual Highest Priority Pending Interrupt Register 1

Exec state	Name	Description
AArch32	ICV_IAR0	Interrupt Controller Virtual Interrupt Acknowledge Register 0
AArch32	ICV_IAR1	Interrupt Controller Virtual Interrupt Acknowledge Register 1
AArch32	ICV_IGRPEN0	Interrupt Controller Virtual Interrupt Group 0 Enable register
AArch32	ICV_IGRPEN1	Interrupt Controller Virtual Interrupt Group 1 Enable register
AArch32	ICV_PMR	Interrupt Controller Virtual Interrupt Priority Mask Register
AArch32	ICV_RPR	Interrupt Controller Virtual Running Priority Register
AArch64	ICC_AP0R <n>_EL1</n>	Interrupt Controller Active Priorities Group 0 Registers
AArch64	ICC_AP1R <n>_EL1</n>	Interrupt Controller Active Priorities Group 1 Registers
AArch64	ICC_ASGI1R_EL1	Interrupt Controller Alias Software Generated Interrupt Group 1 Register
AArch64	ICC_BPR0_EL1	Interrupt Controller Binary Point Register 0
AArch64	ICC_BPR1_EL1	Interrupt Controller Binary Point Register 1
AArch64	ICC_CTLR_EL1	Interrupt Controller Control Register (EL1)
AArch64	ICC_CTLR_EL3	Interrupt Controller Control Register (EL3)
AArch64	ICC_DIR_EL1	Interrupt Controller Deactivate Interrupt Register
AArch64	ICC_EOIR0_EL1	Interrupt Controller End Of Interrupt Register 0
AArch64	ICC_EOIR1_EL1	Interrupt Controller End Of Interrupt Register 1
AArch64	ICC_HPPIR0_EL1	Interrupt Controller Highest Priority Pending Interrupt Register 0
AArch64	ICC_HPPIR1_EL1	Interrupt Controller Highest Priority Pending Interrupt Register 1
AArch64	ICC_IAR0_EL1	Interrupt Controller Interrupt Acknowledge Register 0
AArch64	ICC_IAR1_EL1	Interrupt Controller Interrupt Acknowledge Register 1
AArch64	ICC_IGRPEN0_EL1	Interrupt Controller Interrupt Group 0 Enable register

Exec state	Name	Description
AArch64	ICC_IGRPEN1_EL1	Interrupt Controller Interrupt Group 1 Enable register
AArch64	ICC_IGRPEN1_EL3	Interrupt Controller Interrupt Group 1 Enable register (EL3)
AArch64	ICC_NMIAR1_EL1	Interrupt Controller Non-maskable Interrupt Acknowledge Register 1
AArch64	ICC_PMR_EL1	Interrupt Controller Interrupt Priority Mask Register
AArch64	ICC_RPR_EL1	Interrupt Controller Running Priority Register
AArch64	ICC_SGIOR_EL1	Interrupt Controller Software Generated Interrupt Group 0 Register
AArch64	ICC_SGI1R_EL1	Interrupt Controller Software Generated Interrupt Group 1 Register
AArch64	ICC_SRE_EL1	Interrupt Controller System Register Enable Register (EL1)
AArch64	ICC_SRE_EL2	Interrupt Controller System Register Enable Register (EL2)
AArch64	ICC_SRE_EL3	Interrupt Controller System Register Enable Register (EL3)
AArch64	ICH_APOR <n>_EL2</n>	Interrupt Controller Hyp Active Priorities Group 0 Registers
AArch64	ICH_AP1R <n>_EL2</n>	Interrupt Controller Hyp Active Priorities Group 1 Registers
AArch64	ICH_EISR_EL2	Interrupt Controller End of Interrupt Status Register
AArch64	ICH_ELRSR_EL2	Interrupt Controller Empty List Register Status Register
AArch64	ICH_HCR_EL2	Interrupt Controller Hyp Control Register
AArch64	ICH_LR <n>_EL2</n>	Interrupt Controller List Registers
AArch64	ICH_MISR_EL2	Interrupt Controller Maintenance Interrupt State Register
AArch64	ICH_VMCR_EL2	Interrupt Controller Virtual Machine Control Register
AArch64	ICH_VTR_EL2	Interrupt Controller VGIC Type Register
AArch64	ICV_AP0R <n>_EL1</n>	Interrupt Controller Virtual Active Priorities Group 0 Registers
AArch64	ICV_AP1R <n>_EL1</n>	Interrupt Controller Virtual Active Priorities Group 1 Registers
AArch64	ICV_BPR0_EL1	Interrupt Controller Virtual Binary Point Register 0

Exec state	Name	Description
AArch64	ICV_BPR1_EL1	Interrupt Controller Virtual Binary Point Register 1
AArch64	ICV_CTLR_EL1	Interrupt Controller Virtual Control Register
AArch64	ICV_DIR_EL1	Interrupt Controller Deactivate Virtual Interrupt Register
AArch64	ICV_EOIR0_EL1	Interrupt Controller Virtual End Of Interrupt Register 0
AArch64	ICV_EOIR1_EL1	Interrupt Controller Virtual End Of Interrupt Register 1
AArch64	ICV_HPPIR0_EL1	Interrupt Controller Virtual Highest Priority Pending Interrupt Register 0
AArch64	ICV_HPPIR1_EL1	Interrupt Controller Virtual Highest Priority Pending Interrupt Register 1
AArch64	ICV_IAR0_EL1	Interrupt Controller Virtual Interrupt Acknowledge Register 0
AArch64	ICV_IAR1_EL1	Interrupt Controller Virtual Interrupt Acknowledge Register 1
AArch64	ICV_IGRPEN0_EL1	Interrupt Controller Virtual Interrupt Group 0 Enable register
AArch64	ICV_IGRPEN1_EL1	Interrupt Controller Virtual Interrupt Group 1 Enable register
AArch64	ICV_NMIAR1_EL1	Interrupt Controller Virtual Non- maskable Interrupt Acknowledge Register 1
AArch64	ICV_PMR_EL1	Interrupt Controller Virtual Interrupt Priority Mask Register
AArch64	ICV_RPR_EL1	Interrupt Controller Virtual Running Priority Register

In the GICD functional group:

Exec state	Name	Description
External	GICD_CLRSPI_NSR	Clear Non-secure SPI Pending
		Register
External	GICD_CLRSPI_SR	Clear Secure SPI Pending
		Register
External	GICD_CPENDSGIR <n></n>	SGI Clear-Pending Registers
External	GICD_CTLR	Distributor Control Register
External	GICD_ICACTIVER <n></n>	Interrupt Clear-Active
		Registers

Exec state	Name	Description
External	GICD_ICACTIVER <n>E</n>	Interrupt Clear-Active Registers (extended SPI range)
External	GICD_ICENABLER <n></n>	Interrupt Clear-Enable Registers
External	GICD_ICENABLER <n>E</n>	Interrupt Clear-Enable Registers
External	GICD_ICFGR <n></n>	Interrupt Configuration Registers
External	GICD_ICFGR <n>E</n>	Interrupt Configuration Registers (Extended SPI Range)
External	GICD_ICPENDR <n></n>	Interrupt Clear-Pending Registers
External	GICD_ICPENDR <n>E</n>	Interrupt Clear-Pending Registers (extended SPI range)
External	GICD_IGROUPR <n></n>	Interrupt Group Registers
External	GICD_IGROUPR <n>E</n>	Interrupt Group Registers (extended SPI range)
External	GICD_IGRPMODR <n></n>	Interrupt Group Modifier Registers
External	GICD_IGRPMODR <n>E</n>	Interrupt Group Modifier Registers (extended SPI range)
External	GICD_IIDR	Distributor Implementer Identification Register
External	GICD_INMIR <n></n>	Non-maskable Interrupt Registers, $x = 0$ to 31
External	GICD_INMIR <n>E</n>	Non-maskable Interrupt Registers for Extended SPIs, x = 0 to 31
External	GICD_IPRIORITYR <n></n>	Interrupt Priority Registers
External	GICD_IPRIORITYR <n>E</n>	Holds the priority of the corresponding interrupt for each extended SPI supported by the GIC.
External	GICD_IROUTER <n></n>	Interrupt Routing Registers
External	GICD_IROUTER <n>E</n>	Interrupt Routing Registers (Extended SPI Range)
External	GICD_ISACTIVER <n></n>	Interrupt Set-Active Registers
External	GICD_ISACTIVER <n>E</n>	Interrupt Set-Active Registers (extended SPI range)
External	GICD_ISENABLER <n></n>	Interrupt Set-Enable Registers
External	GICD_ISENABLER <n>E</n>	Interrupt Set-Enable Registers

Exec state	Name	Description
External	GICD_ISPENDR <n></n>	Interrupt Set-Pending Registers
External	GICD_ISPENDR <n>E</n>	Interrupt Set-Pending Registers (extended SPI range)
External	GICD_ITARGETSR <n></n>	Interrupt Processor Targets Registers
External	GICD_NSACR <n></n>	Non-secure Access Control Registers
External	GICD_NSACR <n>E</n>	Non-secure Access Control Registers
External	GICD_SETSPI_NSR	Set Non-secure SPI Pending Register
External	GICD_SETSPI_SR	Set Secure SPI Pending Register
External	GICD_SGIR	Software Generated Interrupt Register
External	GICD_SPENDSGIR <n></n>	SGI Set-Pending Registers
External	GICD_STATUSR	Error Reporting Status Register
External	GICD_TYPER	Interrupt Controller Type Register
External	GICD_TYPER2	Interrupt Controller Type Register 2
External	GICM_CLRSPI_NSR	Clear Non-secure SPI Pending Register
External	GICM_CLRSPI_SR	Clear Secure SPI Pending Register
External	GICM_IIDR	Distributor Implementer Identification Register
External	GICM_SETSPI_NSR	Set Non-secure SPI Pending Register
External	GICM_SETSPI_SR	Set Secure SPI Pending Register
External	GICM_TYPER	Distributor MSI Type Register

In the GICR functional group:

state	Name	Description
External	GICR_CLRLPIR	Clear LPI Pending Register
External	GICR_CTLR	Redistributor Control Register
External	GICR_ICACTIVER0	Interrupt Clear-Active Register 0
External	GICR_ICACTIVER <n>E</n>	Interrupt Clear-Active Registers

Exec state	Name	Description
External	GICR_ICENABLER0	Interrupt Clear-Enable Register 0
External	GICR_ICENABLER <n>E</n>	Interrupt Clear-Enable Registers
External	GICR_ICFGR0	Interrupt Configuration Register 0
External	GICR_ICFGR1	Interrupt Configuration Register 1
External	GICR_ICFGR <n>E</n>	Interrupt configuration registers
External	GICR_ICPENDR0	Interrupt Clear-Pending Register 0
External	GICR_ICPENDR <n>E</n>	Interrupt Clear-Pending Registers
External	GICR IGROUPRO	Interrupt Group Register 0
External	GICR IGROUPR <n>E</n>	Interrupt Group Registers
External	GICR_IGRPMODR0	Interrupt Group Modifier Register 0
External	GICR_IGRPMODR <n>E</n>	Interrupt Group Modifier Registers
External	GICR_IIDR	Redistributor Implementer Identification Register
External	GICR_INMIR0	Non-maskable Interrupt Register for PPIs.
External	GICR_INMIR <n>E</n>	Non-maskable Interrupt Registers for Extended PPIs, x = 1 to 2.
External	GICR_INVALLR	Redistributor Invalidate All Register
External	GICR_INVLPIR	Redistributor Invalidate LPI Register
External	GICR_IPRIORITYR <n></n>	Interrupt Priority Registers
External	GICR_IPRIORITYR <n>E</n>	Interrupt Priority Registers (extended PPI range)
External	GICR_ISACTIVER0	Interrupt Set-Active Register 0
External	GICR_ISACTIVER <n>E</n>	Interrupt Set-Active Registers
External	GICR_ISENABLER0	Interrupt Set-Enable Register 0
External	GICR_ISENABLER <n>E</n>	Interrupt Set-Enable Registers
External	GICR_ISPENDR0	Interrupt Set-Pending Register 0
External	GICR_ISPENDR <n>E</n>	Interrupt Set-Pending Registers

Exec state	Name	Description
External	GICR_MPAMIDR	Report maximum PARTID and PMG Register
External	GICR_NSACR	Non-secure Access Control Register
External	GICR_PARTIDR	Set PARTID and PMG Register
External	GICR_PENDBASER	Redistributor LPI Pending Table Base Address Register
External	GICR_PROPBASER	Redistributor Properties Base Address Register
External	GICR_SETLPIR	Set LPI Pending Register
External	GICR_STATUSR	Error Reporting Status Register
External	GICR_SYNCR	Redistributor Synchronize Register
External	GICR_TYPER	Redistributor Type Register
External	GICR_VPENDBASER	Virtual Redistributor LPI Pending Table Base Address Register
External	GICR_VPROPBASER	Virtual Redistributor Properties Base Address Register
External	GICR_VSGIPENDR	Redistributor virtual SGI pending state register
External	GICR_VSGIR	Redistributor virtual SGI pending state request register
External	GICR_WAKER	Redistributor Wake Register

In the GICC functional group:

Exec state	Name	Description
External	GICC_ABPR	CPU Interface Aliased Binary Point Register
External	GICC_AEOIR	CPU Interface Aliased End Of Interrupt Register
External	GICC_AHPPIR	CPU Interface Aliased Highest Priority Pending Interrupt Register
External	GICC_AIAR	CPU Interface Aliased Interrupt Acknowledge Register
External	GICC_APR <n></n>	CPU Interface Active Priorities Registers
External	GICC_BPR	CPU Interface Binary Point Register
External	GICC_CTLR	CPU Interface Control Register
External	GICC_DIR	CPU Interface Deactivate Interrupt Register

Exec state	Name	Description
External	GICC_EOIR	CPU Interface End Of Interrupt Register
External	GICC_HPPIR	CPU Interface Highest Priority Pending Interrupt Register
External	GICC_IAR	CPU Interface Interrupt Acknowledge Register
External	GICC_IIDR	CPU Interface Identification Register
External	GICC_NSAPR <n></n>	CPU Interface Non-secure Active Priorities Registers
External	GICC_PMR	CPU Interface Priority Mask Register
External	GICC_RPR	CPU Interface Running Priority Register
External	GICC_STATUSR	CPU Interface Status Register

In the GICV functional group:

Exec state	Name	Description
External	GICV_ABPR	Virtual Machine Aliased Binary Point Register
External	GICV_AEOIR	Virtual Machine Aliased End Of Interrupt Register
External	GICV_AHPPIR	Virtual Machine Aliased Highest Priority Pending Interrupt Register
External	GICV_AIAR	Virtual Machine Aliased Interrupt Acknowledge Register
External	GICV_APR <n></n>	Virtual Machine Active Priorities Registers
External	GICV_BPR	Virtual Machine Binary Point Register
External	GICV_CTLR	Virtual Machine Control Register
External	GICV_DIR	Virtual Machine Deactivate Interrupt Register
External	GICV_EOIR	Virtual Machine End Of Interrupt Register
External	GICV_HPPIR	Virtual Machine Highest Priority Pending Interrupt Register
External	GICV_IAR	Virtual Machine Interrupt Acknowledge Register
External	GICV_IIDR	Virtual Machine CPU Interface Identification Register
External	GICV_PMR	Virtual Machine Priority Mask Register
External	GICV_RPR	Virtual Machine Running Priority Register

Exec state	Name	Description
External	GICV_STATUSR	Virtual Machine Error Reporting Status Register

In the GICH functional group:

Exec state	Name	Description
External	GICH_APR <n></n>	Active Priorities Registers
External	GICH_EISR	End Interrupt Status Register
External	GICH_ELRSR	Empty List Register Status Register
External	GICH_HCR	Hypervisor Control Register
External	GICH_LR <n></n>	List Registers
External	GICH_MISR	Maintenance Interrupt Status
		Register
External	GICH_VMCR	Virtual Machine Control Register
External	GICH_VTR	Virtual Type Register

In the GITS functional group:

Exec	Name	Description
state	Name	Description
External	GITS_BASER <n></n>	ITS Translation Table Descriptors
External	GITS_CBASER	ITS Command Queue Descriptor
External	GITS_CREADR	ITS Read Register
External	GITS_CTLR	ITS Control Register
External	GITS_CWRITER	ITS Write Register
External	GITS_IIDR	ITS Identification Register
External	GITS_MPAMIDR	Report maximum PARTID and
		PMG Register
External	<u>GITS_MPIDR</u>	Report ITS's affinity.
External	GITS_PARTIDR	Set PARTID and PMG Register
External	<u>GITS_SGIR</u>	ITS SGI Register
External	GITS_STATUSR	ITS Error Reporting Status
		Register
External	GITS_TRANSLATER	ITS Translation Register
External	<u>GITS_TYPER</u>	ITS Type Register
External	<u>GITS_UMSIR</u>	ITS Unmapped MSI register

In the BRBE functional group:

Exec state	Name	Description
AArch64	BRBCR_EL1	Branch Record Buffer Control Register (EL1)
	-	

Exec state	Name	Description
AArch64	BRBCR_EL2	Branch Record Buffer Control Register (EL2)
AArch64	BRBFCR_EL1	Branch Record Buffer Function Control Register
AArch64	BRBIDR0_EL1	Branch Record Buffer ID0 Register
AArch64	BRBINF <n>_EL1</n>	Branch Record Buffer Information Register <n></n>
AArch64	BRBINFINJ_EL1	Branch Record Buffer Information Injection Register
AArch64	BRBSRC <n>_EL1</n>	Branch Record Buffer Source Address Register <n></n>
AArch64	BRBSRCINJ_EL1	Branch Record Buffer Source Address Injection Register
AArch64	BRBTGT <n>_EL1</n>	Branch Record Buffer Target Address Register <n></n>
AArch64	BRBTGTINJ_EL1	Branch Record Buffer Target Address Injection Register
AArch64	BRBTS_EL1	Branch Record Buffer Timestamp Register

In the RAS functional group:

Exec state	Name	Description
AArch32	DISR	Deferred Interrupt Status Register
AArch32	<u>ERRIDR</u>	Error Record ID Register
AArch32	<u>ERRSELR</u>	Error Record Select Register
AArch32	<u>ERXADDR</u>	Selected Error Record Address Register
AArch32	ERXADDR2	Selected Error Record Address Register 2
AArch32	<u>ERXCTLR</u>	Selected Error Record Control Register
AArch32	ERXCTLR2	Selected Error Record Control Register 2
AArch32	<u>ERXFR</u>	Selected Error Record Feature Register
AArch32	ERXFR2	Selected Error Record Feature Register 2
AArch32	ERXMISC0	Selected Error Record Miscellaneous Register 0
AArch32	ERXMISC1	Selected Error Record Miscellaneous Register 1
AArch32	ERXMISC2	Selected Error Record Miscellaneous Register 2

Exec state	Name	Description
AArch32	ERXMISC3	Selected Error Record Miscellaneous Register 3
AArch32	ERXMISC4	Selected Error Record Miscellaneous Register 4
AArch32	ERXMISC5	Selected Error Record Miscellaneous Register 5
AArch32	ERXMISC6	Selected Error Record Miscellaneous Register 6
AArch32	ERXMISC7	Selected Error Record Miscellaneous Register 7
AArch32	<u>ERXSTATUS</u>	Selected Error Record Primary Status Register
AArch32	VDFSR	Virtual SError Exception Syndrome Register
AArch32	VDISR	Virtual Deferred Interrupt Status Register
AArch64	DISR EL1	Deferred Interrupt Status Register
AArch64	ERRIDR EL1	Error Record ID Register
AArch64	ERRSELR EL1	Error Record Select Register
AArch64	ERXADDR_EL1	Selected Error Record Address Register
AArch64	ERXCTLR_EL1	Selected Error Record Control Register
AArch64	ERXFR_EL1	Selected Error Record Feature Register
AArch64	ERXGSR_EL1	Selected Error Record Group Status Register
AArch64	ERXMISC0_EL1	Selected Error Record Miscellaneous Register 0
AArch64	ERXMISC1_EL1	Selected Error Record Miscellaneous Register 1
AArch64	ERXMISC2_EL1	Selected Error Record Miscellaneous Register 2
AArch64	ERXMISC3_EL1	Selected Error Record Miscellaneous Register 3
AArch64	ERXPFGCDN_EL1	Selected Pseudo-fault Generation Countdown Register
AArch64	ERXPFGCTL_EL1	Selected Pseudo-fault Generation Control Register
AArch64	ERXPFGF_EL1	Selected Pseudo-fault Generation Feature Register
AArch64	ERXSTATUS_EL1	Selected Error Record Primary Status Register
AArch64	MFAR_EL3	Physical Fault Address Register (EL3)

Exec state	Name	Description
AArch64	VDISR_EL2	Virtual Deferred Interrupt Status Register
AArch64	VSESR_EL2	Virtual SError Exception Syndrome Register
External	ERR <n>ADDR</n>	Error Record <n> Address Register</n>
External	ERR <n>CTLR</n>	Error Record <n> Control Register</n>
External	ERR <n>FR</n>	Error Record <n> Feature Register</n>
External	ERR <n>MISC0</n>	Error Record <n> Miscellaneous Register 0</n>
External	ERR <n>MISC1</n>	Error Record <n> Miscellaneous Register 1</n>
External	ERR <n>MISC2</n>	Error Record <n> Miscellaneous Register 2</n>
External	ERR <n>MISC3</n>	Error Record <n> Miscellaneous Register 3</n>
External	ERR <n>PFGCDN</n>	Error Record <n> Pseudo-fault Generation Countdown Register</n>
External	ERR <n>PFGCTL</n>	Error Record <n> Pseudo-fault Generation Control Register</n>
External	ERR <n>PFGF</n>	Error Record <n> Pseudo-fault Generation Feature Register</n>
External	ERR <n>STATUS</n>	Error Record <n> Primary Status Register</n>
External	<u>ERRACR</u>	Access Configuration Register
External	ERRCIDR0	Component Identification Register 0
External	ERRCIDR1	Component Identification Register 1
External	ERRCIDR2	Component Identification Register 2
External	ERRCIDR3	Component Identification Register 3
External	ERRCRICR0	Critical Error Interrupt Configuration Register 0
External	ERRCRICR1	Critical Error Interrupt Configuration Register 1
External	ERRCRICR2	Critical Error Interrupt Configuration Register 2
External	ERRDEVAFF	Device Affinity Register
External	ERRDEVARCH	Device Architecture Register
External	ERRDEVID	Device Configuration Register
External	ERRERICR0	Error Recovery Interrupt Configuration Register 0
External	ERRERICR1	Error Recovery Interrupt Configuration Register 1
External	ERRERICR2	Error Recovery Interrupt Configuration Register 2
External	ERRFHICR0	Fault Handling Interrupt Configuration Register 0

Exec state	Name	Description
External	ERRFHICR1	Fault Handling Interrupt Configuration Register 1
External	ERRFHICR2	Fault Handling Interrupt Configuration Register 2
External	<u>ERRGSR</u>	Error Group Status Register
External	<u>ERRIIDR</u>	Implementation Identification Register
External	ERRIMPDEF <n></n>	IMPLEMENTATION DEFINED Register <n></n>
External	ERRIRQCR <n></n>	Generic Error Interrupt Configuration Register <n></n>
External	<u>ERRIRQSR</u>	Error Interrupt Status Register
External	ERRPIDR0	Peripheral Identification Register 0
External	ERRPIDR1	Peripheral Identification Register 1
External	ERRPIDR2	Peripheral Identification Register 2
External	ERRPIDR3	Peripheral Identification Register 3
External	ERRPIDR4	Peripheral Identification Register 4

In the MPAM functional group:

Exec state	Name	Description
AArch64	MPAM0_EL1	MPAM0 Register (EL1)
AArch64	MPAM1_EL1	MPAM1 Register (EL1)
AArch64	MPAM2_EL2	MPAM2 Register (EL2)
AArch64	MPAM3_EL3	MPAM3 Register (EL3)
AArch64	MPAMHCR_EL2	MPAM Hypervisor Control Register (EL2)
AArch64	MPAMSM_EL1	MPAM Streaming Mode Register
AArch64	MPAMVPM0_EL2	MPAM Virtual PARTID Mapping Register 0
AArch64	MPAMVPM1_EL2	MPAM Virtual PARTID Mapping Register 1
AArch64	MPAMVPM2_EL2	MPAM Virtual PARTID Mapping Register 2
AArch64	MPAMVPM3_EL2	MPAM Virtual PARTID Mapping Register 3
AArch64	MPAMVPM4_EL2	MPAM Virtual PARTID Mapping Register 4
AArch64	MPAMVPM5_EL2	MPAM Virtual PARTID Mapping Register 5
AArch64	MPAMVPM6_EL2	MPAM Virtual PARTID Mapping Register 6

Exec state	Name	Description
AArch64	MPAMVPM7_EL2	MPAM Virtual PARTID Mapping Register 7
AArch64	MPAMVPMV_EL2	MPAM Virtual Partition Mapping Valid Register
External	MPAMCFG_CASSOC	MPAM Cache Maximum Associativity Partition Configuration Register
External	MPAMCFG_CMAX	MPAM Cache Maximum Capacity Partition Configuration Register
External	MPAMCFG_CMIN	MPAM Cache Minimum Capacity Partition Configuration Register
External	MPAMCFG_CPBM <n></n>	MPAM Cache Portion Bitmap Partition Configuration Register
External	MPAMCFG_DIS	MPAM Partition Configuration Disable Register
External	MPAMCFG_EN	MPAM Partition Configuration Enable Register
External	MPAMCFG_EN_FLAGS	MPAM Partition Configuration Enable Flags Register
External	MPAMCFG_INTPARTID	MPAM Internal PARTID Narrowing Configuration Register
External	MPAMCFG_MBW_MAX	MPAM Memory Bandwidth Maximum Partition Configuration Register
External	MPAMCFG_MBW_MIN	MPAM Memory Bandwidth Minimum Partition Configuration Register
External	MPAMCFG_MBW_PBM <n></n>	MPAM Bandwidth Portion Bitmap Partition Configuration Register
External	MPAMCFG_MBW_PROP	MPAM Memory Bandwidth Proportional Stride Partition Configuration Register

Exec state	Name	Description
External	MPAMCFG_MBW_WINWD	MPAM Memory Bandwidth Partitioning Window Width Configuration Register
External	MPAMCFG_PART_SEL	MPAM Partition Configuration Selection Register
External	MPAMCFG_PRI	MPAM Priority Partition Configuration Register
External	MPAMF_AIDR	MPAM Architecture Identification Register
External	MPAMF_CCAP_IDR	MPAM Features Cache Capacity Partitioning ID register
External	MPAMF_CPOR_IDR	MPAM Features Cache Portion Partitioning ID register
External	MPAMF_CSUMON_IDR	MPAM Features Cache Storage Usage Monitoring ID register
External	MPAMF_ECR	MPAM Error Control Register
External	MPAMF_ERR_MSI_ADDR_H	MPAM Error MSI High- part Address Register
External	MPAMF_ERR_MSI_ADDR_L	MPAM Error MSI Low- part Address Register
External	MPAMF_ERR_MSI_ATTR	MPAM Error MSI Write Attributes Register
External	MPAMF_ERR_MSI_DATA	MPAM Error MSI Data Register
External	MPAMF_ERR_MSI_MPAM	MPAM Error MSI Write MPAM Information Register
External	MPAMF_ESR	MPAM Error Status Register
External	MPAMF_IDR	MPAM Features Identification Register
External	MPAMF_IIDR	MPAM Implementation Identification Register
External	MPAMF_IMPL_IDR	MPAM Implementation- Specific Partitioning Feature Identification Register

Exec state	Name	Description
External	MPAMF_MBWUMON_IDR	MPAM Features Memory Bandwidth Usage Monitoring ID register
External	MPAMF_MBW_IDR	MPAM Memory Bandwidth Partitioning Identification Register
External	MPAMF_MSMON_IDR	MPAM Resource Monitoring Identification Register
External	MPAMF_PARTID_NRW_IDR	MPAM PARTID Narrowing ID register
External	MPAMF_PRI_IDR	MPAM Priority Partitioning Identification Register
External	MPAMF_SIDR	MPAM Features Secure Identification Register
External	MSMON_CAPT_EVNT	MPAM Capture Event Generation Register
External	MSMON_CFG_CSU_CTL	MPAM Memory System Monitor Configure Cache Storage Usage Monitor Control Register
External	MSMON_CFG_CSU_FLT	MPAM Memory System Monitor Configure Cache Storage Usage Monitor Filter Register
External	MSMON_CFG_MBWU_CTL	MPAM Memory System Monitor Configure Memory Bandwidth Usage Monitor Control Register
External	MSMON_CFG_MBWU_FLT	MPAM Memory System Monitor Configure Memory Bandwidth Usage Monitor Filter Register
External	MSMON_CFG_MON_SEL	MPAM Monitor Instance Selection Register
External	MSMON_CSU	MPAM Cache Storage Usage Monitor Register
External	MSMON_CSU_CAPTURE	MPAM Cache Storage Usage Monitor Capture Register

Exec state	Name	Description
External	MSMON_CSU_OFSR	MPAM CSU Monitor Overflow Status Register
External	MSMON_MBWU	MPAM Memory Bandwidth Usage Monitor Register
External	MSMON_MBWU_CAPTURE	MPAM Memory Bandwidth Usage Monitor Capture Register
External	MSMON_MBWU_L	MPAM Long Memory Bandwidth Usage Monitor Register
External	MSMON_MBWU_L_CAPTURE	MPAM Long Memory Bandwidth Usage Monitor Capture Register
External	MSMON_MBWU_OFSR	MPAM MBWU Monitor Overflow Status Register
External	MSMON_OFLOW_MSI_ADDR_H	MPAM Monitor Overflow MSI Write High-part Address Register
External	MSMON_OFLOW_MSI_ADDR_L	MPAM Monitor Overflow MSI Low-part Address Register
External	MSMON_OFLOW_MSI_ATTR	MPAM Monitor Overflow MSI Write Attributes Register
External	MSMON_OFLOW_MSI_DATA	MPAM Monitor Overflow MSI Write Data Register
External	MSMON_OFLOW_MSI_MPAM	MPAM Monitor Overflow MSI Write MPAM Information Register
External	MSMON_OFLOW_SR	MPAM Monitor Overflow Status Register

In the Pointer authentication functional group:

Exec state	Name	Description
AArch64	APDAKeyHi_EL1	Pointer Authentication Key A for Data (bits[127:64])

Exec state	Name	Description
AArch64	APDAKeyLo_EL1	Pointer Authentication Key A for Data (bits[63:0])
AArch64	APDBKeyHi_EL1	Pointer Authentication Key B for Data (bits[127:64])
AArch64	APDBKeyLo_EL1	Pointer Authentication Key B for Data (bits[63:0])
AArch64	APGAKeyHi_EL1	Pointer Authentication Key A for Code (bits[127:64])
AArch64	APGAKeyLo_EL1	Pointer Authentication Key A for Code (bits[63:0])
AArch64	APIAKeyHi_EL1	Pointer Authentication Key A for Instruction (bits[127:64])
AArch64	APIAKeyLo_EL1	Pointer Authentication Key A for Instruction (bits[63:0])
AArch64	APIBKeyHi_EL1	Pointer Authentication Key B for Instruction (bits[127:64])
AArch64	APIBKeyLo_EL1	Pointer Authentication Key B for Instruction (bits[63:0])

In the AMU functional group:

Exec state	Name	Description
AArch32	AMCFGR	Activity Monitors Configuration Register
AArch32	AMCGCR	Activity Monitors Counter Group Configuration Register
AArch32	AMCNTENCLR0	Activity Monitors Count Enable Clear Register 0
AArch32	AMCNTENCLR1	Activity Monitors Count Enable Clear Register 1
AArch32	AMCNTENSET0	Activity Monitors Count Enable Set Register 0
AArch32	AMCNTENSET1	Activity Monitors Count Enable Set Register 1
AArch32	AMCR	Activity Monitors Control Register
AArch32	AMEVCNTR0 <n></n>	Activity Monitors Event Counter Registers 0
AArch32	AMEVCNTR1 <n></n>	Activity Monitors Event Counter Registers 1
AArch32	AMEVTYPER0 <n></n>	Activity Monitors Event Type Registers 0
AArch32	AMEVTYPER1 <n></n>	Activity Monitors Event Type Registers 1

Exec state	Name	Description
AArch32	AMUSERENR	Activity Monitors User Enable Register
AArch64	AMCFGR_EL0	Activity Monitors Configuration Register
AArch64	AMCG1IDR_EL0	Activity Monitors Counter Group 1 Identification Register
AArch64	AMCGCR_EL0	Activity Monitors Counter Group Configuration Register
AArch64	AMCNTENCLR0_EL0	Activity Monitors Count Enable Clear Register 0
AArch64	AMCNTENCLR1_EL0	Activity Monitors Count Enable Clear Register 1
AArch64	AMCNTENSET0_EL0	Activity Monitors Count Enable Set Register 0
AArch64	AMCNTENSET1_EL0	Activity Monitors Count Enable Set Register 1
AArch64	AMCR_EL0	Activity Monitors Control Register
AArch64	AMEVCNTR0 <n>_EL0</n>	Activity Monitors Event Counter Registers 0
AArch64	AMEVCNTR1 <n>_EL0</n>	Activity Monitors Event Counter Registers 1
AArch64	AMEVCNTVOFF0 <n>_EL2</n>	Activity Monitors Event Counter Virtual Offset Registers 0
AArch64	AMEVCNTVOFF1 <n>_EL2</n>	Activity Monitors Event Counter Virtual Offset Registers 1
AArch64	AMEVTYPER0 <n>_EL0</n>	Activity Monitors Event Type Registers 0
AArch64	AMEVTYPER1 <n>_EL0</n>	Activity Monitors Event Type Registers 1
AArch64	AMUSERENR_EL0	Activity Monitors User Enable Register
External	AMCFGR	Activity Monitors Configuration Register
External	AMCGCR	Activity Monitors Counter Group Configuration Register
External	AMCIDR0	Activity Monitors Component Identification Register 0

Exec state	Name	Description
External	AMCIDR1	Activity Monitors Component Identification Register 1
External	AMCIDR2	Activity Monitors Component Identification Register 2
External	AMCIDR3	Activity Monitors Component Identification Register 3
External	AMCNTENCLR0	Activity Monitors Count Enable Clear Register 0
External	AMCNTENCLR1	Activity Monitors Count Enable Clear Register 1
External	AMCNTENSET0	Activity Monitors Count Enable Set Register 0
External	AMCNTENSET1	Activity Monitors Count Enable Set Register 1
External	AMCR	Activity Monitors Control Register
External	AMDEVAFF0	Activity Monitors Device Affinity Register 0
External	AMDEVAFF1	Activity Monitors Device Affinity Register 1
External	<u>AMDEVARCH</u>	Activity Monitors Device Architecture Register
External	<u>AMDEVTYPE</u>	Activity Monitors Device Type Register
External	AMEVCNTR0 <n></n>	Activity Monitors Event Counter Registers 0
External	AMEVCNTR1 <n></n>	Activity Monitors Event Counter Registers 1
External	AMEVTYPER0 <n></n>	Activity Monitors Event Type Registers 0
External	AMEVTYPER1 <n></n>	Activity Monitors Event Type Registers 1
External	AMIIDR	Activity Monitors Implementation Identification Register
External	AMPIDR0	Activity Monitors Peripheral Identification Register 0
External	AMPIDR1	Activity Monitors Peripheral Identification Register 1
External	AMPIDR2	Activity Monitors Peripheral Identification Register 2
External	AMPIDR3	Activity Monitors Peripheral Identification Register 3

Exec state	Name	Description
External	AMPIDR4	Activity Monitors Peripheral Identification Register 4

In the Root functional group:

Exec state	Name	Description
AArch64	GPCCR_EL3	Granule Protection Check Control Register (EL3)
AArch64	GPTBR_EL3	Granule Protection Table Base Register

In the GIC ITS registers functional group:

exec state	Name	Description
External	GITS_BASER <n></n>	ITS Translation Table Descriptors
External	GITS_CBASER	ITS Command Queue Descriptor
External	GITS_CREADR	ITS Read Register
External	GITS_CTLR	ITS Control Register
External	<u>GITS_CWRITER</u>	ITS Write Register
External	<u>GITS_IIDR</u>	ITS Identification Register
External	GITS_MPAMIDR	Report maximum PARTID and PMG Register
External	GITS MPIDR	Report ITS's affinity.
External	GITS_PARTIDR	Set PARTID and PMG Register
External	GITS_SGIR	ITS SGI Register
External	GITS_STATUSR	ITS Error Reporting Status Register
External	GITS_TRANSLATER	ITS Translation Register
External	GITS_TYPER	ITS Type Register
External	<u>GITS_UMSIR</u>	ITS Unmapped MSI register

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External

Registers

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