

Base Value (Bits 63:32, Hex)	Status	Name	DETAILS_L2 (Bits 31:0)	Description
0x00000000	Success	TDX_SUCCESS	For TDH.VP.ENTER: Exit Reason For TDG.VP.ENTER: Exit Reason For list operations: Number of problematic sub-operations (e.g., a page in a list not processed due to an incorrect state).	Function completed successfully.
0x20000000	Fatal	TDX_SUCCESS_FATAL	0	Function completed successfully, but the TD should be torn down.
0x40000001	Non-Recover.	TDX_NON_RECOVERABLE_VCPU	For TDH.VP.ENTER: Exit Reason	TD exit due to a non-recoverable VCPU state (e.g., triple fault) - VCPU is disabled
0x60000002	Fatal	TDX_NON_RECOVERABLE_TD	For TDH.VP.ENTER: Exit Reason	TD exit due to a non-recoverable TD state - TD is disabled
0x80000003	Recover. Error	TDX_INTERRUPTED_RESUMABLE	0	Function operation has been interrupted by an external event, and it may be resumed from the point it was interrupted by calling it again.
0x80000004	Recover. Error	TDX_INTERRUPTED_RESTARTABLE	0	Function operation has been interrupted by an external event, and it may be restarted (from its beginning) by calling it again.
0x60000005	Fatal	TDX_NON_RECOVERABLE_TD_NON_ACCESSIBLE	For TDH.VP.ENTER: Exit Reason	TD exit due to a fatal TD state (e.g., machine check caused by a memory integrity check error) - TD is disabled and its private memory can't be accessed.
0xC0000006	Error	TDX_INVALID_RESUMPTION	0	Resumed function is invalid, e.g., its operands are different than the last interrupted function.
0xE0000006	Fatal	TDX_INVALID_RESUMPTION_FATAL	0	Resumed function is invalid, e.g., its operands are different than the last interrupted function. TD should be torn down.
0xE0000007	Fatal	TDX_NON_RECOVERABLE_TD_WRONG_APIC_MODE	TDH.VP.ENTER: Exit Reason	TD is disabled due to host VMM running with wrong local APIC mode, e.g.: - Local APIC is disabled.
0x80000008	Recover. Error	TDX_CROSS_TD_FAULT	0	Fault-like TD exit due to a cross-TD error, i.e., the current TD encountered an error that is related to some other TD.
0x90000009	Host Recover. Error	TDX_CROSS_TD_TRAP	0	Trap-like TD exit due to a cross-TD error, i.e., the current TD
0x6000000A	Fatal	TDX_NON_RECOVERABLE_TD_CORRUPTED_MD	0	TD exit due to a non-recoverable corrupted TD metadata - TD is disabled
0x8000000B	Recover. Error	TDX_TDCALL_RATE_LIMIT	0	A long latency guest-side (TDCALL) interface function was
0x8000000C	Recover. Error	TDX_INTERRUPTED_LIST_FULL	0	Operation was interrupted because the output list is full. The
0x8000000D	Recover. Error	TDX_INTERRUPTED_BLOCKED_RANGE	0	Operation was interrupted because a GPA range (non-leaf SEPT
0x8000000E	Recover. Error	TDX_INTERRUPTED_LIST_END	0	Operation was interrupted because the input list has reached its end, but there should be more entries to process. The host
0xC0000100	Error	TDX_OPERAND_INVALID	Operand ID	Operand is invalid.
0xE0000100	Fatal	TDX_OPERAND_INVALID_FATAL	Operand ID	Operand is invalid, TD should be torn down.
0xC0000101	Error	TDX_OPERAND_ADDR_RANGE_ERROR	Operand ID	Operand address is out of range (e.g., not in a TDMR).
0xE0000101	Fatal	TDX_OPERAND_ADDR_RANGE_ERROR_FATAL	Operand ID	Operand address is out of range (e.g., not in a TDMR), TD should be torn down.
0xC0000102	Error	TDX_EVENT_FILTER_INVALID	Number of the event in the list	EVENT_FILTER provided to TDH.MNG.INIT is invalid.
0xC0000103	Error	TDX_EVENT_FILTER_ORDER_INVALID	Number of the event in the list	EVENT_FILTERS provided to TDH.MNG.INIT are not sorted as required.
0x80000200	Recover. Error	TDX_OPERAND_BUSY	Operand ID	The operand is busy (e.g., it is locked in Exclusive mode).
0x90000200	Host Recover. Error	TDX_OPERAND_BUSY_HOST_RECOVERABILITY_HINT	Operand ID	Guest-side (TDCALL) only: The operand is busy (e.g., it is locked in Exclusive mode), but the host VMM indicated that this error is not recoverable.
0xA0000200	Fatal	TDX_OPERAND_BUSY_FATAL	Operand ID	The operand is busy (e.g., it is locked in Exclusive mode), TD should be torn down.
0x80000201	Recover. Error	TDX_PREVIOUS_TLB_EPOCH_BUSY	0	TDH.MEM.TRACK failed because one or more of the TD's VCPUs are
0x80000202	Recover. Error	TDX_SYS_BUSY	0	The Intel TDX module (as a whole) is busy.
0x80000203	Recover. Error	TDX_RND_NO_ENTROPY	0	Random number generation (e.g., RDRAND or RDSEED) failed
0x80000204	Recover. Error	TDX_OPERAND_BUSY_HOST_PRIORITY	Operand ID	For host-side functions: The operand is busy; HOST_PRIORITY
0x90000205	Host Recover. Error	TDX_HOST_PRIORITY_BUSY_TIMEOUT	0	Guest TD encountered a resource that has been busy due to host
0x80000206	Recover. Error	TDX_INTERRUPTED_BUSY	Operand ID	Function operation has been interrupted because of a busy operand, and it may be resumed from the point it was
0xC0000300	Error	TDX_PAGE_METADATA_INCORRECT	Operand ID	Physical page metadata (in PAMT) are incorrect for the requested operation.
0xE0000300	Fatal	TDX_PAGE_METADATA_INCORRECT_FATAL	Operand ID	Physical page metadata (in PAMT) are incorrect for the requested operation, TD should be torn down.

0xC0000301	Success	TDX_PAGE_ALREADY_FREE	Operand ID	Physical page is already marked as PT FREE.
0xC0000302	Error	TDX_PAGE_NOT_OWNED_BY_TD	Operand ID	Physical page PAMT entry's OWNER field does not point to the
0xC0000303	Error	TDX_PAGE_NOT_FREE	Operand ID	Physical page is not free.
0xC0000304	Error	TDX_HPA_RANGE_NOT_FREE	Operand ID	Physical memory range is not free.
0xC0000305	Error	TDX_NO_PAMT_PAGE_PAIR	Operand ID	No PAMT page pair exists for the specified 2MB HPA range.
0xC0000306	Error	TDX_PAMT_PAGE_NOT_EMPTY	PAMT page index in the PAMT page pair (0 or	PAMT page contains one or more entries that are not free.
0x80000307	Recover. Error	TDX_INTERRUPTED_PAMT	Operand ID	Function operation has been interrupted by missing PAMT page pair. It may be resumed from the point it was interrupted
0x80000308	Recover. Error	TDX_MISSING_PAMT_PAGE_PAIR	Operand ID	PAMT page pair mapping the specified 4KB HPA is missing. The function may be retried after adding the missing PAMT page
0xC0000400	Error	TDX_TD_ASSOCIATED_PAGES_EXIST	0	Physical pages associated with the TD exist in memory.
0xC0000500	Error	TDX_SYS_INIT_NOT_PENDING	0	Attempting TDH.SYS.INIT when not expected.
0xC0000502	Error	TDX_SYS_LP_INIT_NOT_DONE	0	Attempting non-TDH.SYS.LP.INIT SEAMCALL leaf before TDH.SYS.LP.INIT was done on this LP.
0xC0000503	Error	TDX_SYS_LP_INIT_DONE	0	Attempting TDH.SYS.LP.INIT when already done on this LP.
0xC0000505	Error	TDX_SYS_NOT_READY	0	Attempting to execute a non-initialization SEAMCALL function before initialization sequence completed.
0xC0000506	Error	TDX_SYS_SHUTDOWN	0	Attempting to execute SEAMCALL when the Intel TDX module is
0xC0000507	Error	TDX_SYS_KEY_CONFIG_NOT_PENDING	0	Attempting TDH.SYS.KEY.CONFIG when it is not pending.
0xC0000508	Error	TDX_SYS_STATE_INCORRECT	0	TDX module state is incorrect for the requested operation.
0xC0000509	Error	TDX_SYS_INVALID_HANDOFF	0	Handoff data is incorrect for TD-preserving TDX module update.
0xC000050A	Error	TDX_SYS_INCOMPATIBLE_SIGSTRUCT	0	TDX module SIGSTRUCT is incompatible with the current TDX module.
0xC000050B	Error	TDX_SYS_LP_INIT_NOT_PENDING	0	Attempting TDH.SYS.LP.INIT when it is not pending.
0xC000050C	Error	TDX_SYS_CONFIG_NOT_PENDING	0	Attempting TDH.SYS.CONFIG when it is not pending.
0xC000050D	Error	TDX_INCOMPATIBLE_SEAM_CAPABILITIES	0	The CPU does not support the capabilities, as reported by
0xC000050F	Error	TDX_INCOMPATIBLE_SEAM_FEATURES	0	The CPU does not support the features, as reported by
0xC0000511	Error	TDX_CRYPTO_SELF_TEST_FAILED	0	The TDX module's self-test of its crypto library failed.
0x80000512	Recover. Error	TDX_UPDATE_COMPATIBILITY_SENSITIVE	Bits 15:0: Reason 0: TD Build in progress	TDH.SYS.SHUTDOWN detected that there is one or more ongoing flows which may not be compatible with an updated TDX module.
0xE0000604	Fatal	TDX_TD_FATAL	Operand ID (0 if default)	TD is in a FATAL error state, it should be torn down.
0xC0000605	Error	TDX_TD_NON_DEBUG	Operand ID (0 if default)	TD's ATTRIBUTES.DEBUG bit is 0.
0xC0000606	Error	TDX_TDCS_NOT_ALLOCATED	Operand ID (0 if default)	TDCS pages have not been allocated
0xC0000607	Error	TDX_LIFECYCLE_STATE_INCORRECT	Operand ID (0 if default)	The TD's LIFECYCLE_STATE is incorrect for the required operation.
0xC0000608	Error	TDX_OP_STATE_INCORRECT	OP_STATE value (0 if default)	The TD's OP_STATE is incorrect for the required operation.
0xE0000608	Fatal	TDX_OP_STATE_INCORRECT_FATAL	OP_STATE value (0 if default)	The TD's OP_STATE is incorrect for the required operation, TD
0xC0000609	Error	TDX_NO_VCPUS	0	TDH.MR.FINALIZE called when no VCPUS have been initialized.
0xC000060A	Error	TDX_DEBUG_MEM_NOT_WRITABLE	0	Although the TD's ATTRIBUTES.DEBUG is 1, the TD memory is not
0xC0000610	Error	TDX_TDCX_NUM_INCORRECT	Operand ID (0 if default)	The number of TDCX pages is incorrect.
0xC0000621	Error	TDX_X2APIC_ID_NOT_UNIQUE	X2APIC ID	The same virtual x2APIC ID value has been assigned to more than one VCPU.
0xE0000621	Fatal	TDX_X2APIC_ID_NOT_UNIQUE_FATAL	X2APIC ID	The same virtual x2APIC ID value has been assigned to more than
0xC0000622	Error	TDX_INCOMPATIBLE_MRTD_CONTEXT	0	Crypto context of MRTD, updated during TD build by
0xC0000700	Error	TDX_VCPU_STATE_INCORRECT	VCPU_STATE	The VCPU state is incorrect for the requested operation.
0xE0000700	Fatal	TDX_VCPU_STATE_INCORRECT_FATAL	VCPU_STATE	The VCPU state is incorrect for the requested operation, the TD
0x80000701	Recover. Error	TDX_VCPU_ASSOCIATED	0	The VCPU is already associated with another LP.
0xA0000701	Fatal	TDX_VCPU_ASSOCIATED_FATAL	0	The VCPU is already associated with another LP, the TD should
0x80000702	Recover. Error	TDX_VCPU_NOT_ASSOCIATED	0	The VCPU is not associated with the current LP.
0xC0000704	Error	TDX_NO_VALID_VE_INFO	0	There is no valid #VE information.
0xC0000705	Error	TDX_MAX_VCPUS_EXCEEDED	0	TD's maximum number of VCPUS has been exceeded.
0xC0000706	Error	TDX_TSC_ROLLBACK	0	Time Stamp Counter value is lower than on last TD exit.
0xC0000707	Error	TDX_INTERRUPTIBILITY_BLOCKED	VMCS Interruptibility State field	Guest TD is not interruptible, due to executing an STI, MOV to SS or POP to SS instruction immediately before TDCALL.
0xC0000730	Error	TDX_TD_VMCS_FIELD_NOT_INITIALIZED	Bits 31:0: VMCS field code	The TD VMCS field has not been initialized.
0xC0000731	Error	TDX_VMCS_FIELD_ERROR	Bits 31:0: VMCS field code	The TD VMCS field read or write failed.
0x80000800	Recover. Error	TDX_KEY_GENERATION_FAILED	0	Failed to generate a random key. This is typically caused by
0x80000810	Recover. Error	TDX_TD_KEYS_NOT_CONFIGURED	0	TD keys have not been configured on the hardware.
0xC0000811	Error	TDX_KEY_STATE_INCORRECT	0	KOT entry state is incorrect for the required operation.
0x00000815	Success	TDX_KEY_CONFIGURED	0	The key is already configured on the current package.
0x80000817	Recover. Error	TDX_WBCACHE_NOT_COMPLETE	0	Attempting to execute TDH.MNG.KEY.FREEID when
0xC0000820	Error	TDX_HKID_NOT_FREE	0	A provided HKID cannot be assigned because it is not free.
0x00000821	Success	TDX_NO_HKID_READY_TO_WBCACHE	0	No private HKID is in the HKID FLUSHED state, ready for
0xC0000823	Error	TDX_WBCACHE_RESUME_ERROR	0	Resume of a previously interrupted function has been aborted

0x80000824	Recover. Error	TDX_FLUSHVP_NOT_DONE	0	TDH.VP.FLUSH was not done on all required VCPUS; some VCPUS are
0xC0000825	Error	TDX_NUM_ACTIVATED_HKIDS_NOT_SUPPORTED	Bits 31:0: Maximum supported HKIDs	The number of activated key IDs on the platform is not supported.
0xC0000900	Error	TDX_INCORRECT_CPUID_VALUE	0	A CPUID value is incorrect.
0xC0000901	Error	TDX_LIMIT_CPUID_MAXVAL_SET	0	MSR IA32_MISC_ENABLES bit 22 (Limit CPUID Maxval) is set.
0xC0000902	Error	TDX_INCONSISTENT_CPUID_FIELD	0	A field returned by CPUID is inconsistent between LPs.
0xC0000903	Error	TDX_CPUID_MAX_SUBLEAVES_UNRECOGNIZED	CPUID leaf	The maximum number of sub-leaves for this CPUID leaf is not
0xC0000904	Error	TDX_CPUID_LEAF_1F_FORMAT_UNRECOGNIZED	0	CPUID leaf 1F format is not recognized or sub-leaves are not in
0xE0000904	Fatal	TDX_CPUID_LEAF_1F_FORMAT_UNRECOGNIZED_FATAL	0	CPUID leaf 1F format is not recognized or sub-leaves are not in
0xC0000905	Error	TDX_INVALID_WBINVD_SCOPE	0	WBINVD scope is not supported.
0xC0000906	Error	TDX_INVALID_PKG_ID	Package ID	Package ID is larger than the maximum supported.
0xC0000907	Error	TDX_ENABLE_MONITOR_FSM_NOT_SET	0	MSR IA32_MISC_ENABLES bit 3 (Enable Monitor FSM) is not set.
0xC0000908	Error	TDX_CPUID_LEAF_NOT_SUPPORTED	CPUID leaf	0
0xC0000910	Error	TDX_SMRR_NOT_LOCKED	0: SMRR, 1: SMRR2	SMRR* is not locked.
0xC0000911	Error	TDX_INVALID_SMRR_CONFIGURATION	0: SMRR, 1: SMRR2	SMRR* configuration is invalid.
0xC0000912	Error	TDX_SMRR_OVERLAPS_CMR	Bits 7:0: 0: SMRR, 1: SMRR2	SMRR* overlaps a CMR.
0xC0000913	Error	TDX_SMRR_LOCK_NOT_SUPPORTED	0	Platform does not support SMRR locking.
0xC0000914	Error	TDX_SMRR_NOT_SUPPORTED	0	Platform does not support SMRR.
0xC0000920	Error	TDX_INCONSISTENT_MSR	Bits 31:0: MSR index	MSR configuration is inconsistent between LPs.
0xC0000921	Error	TDX_INCORRECT_MSR_VALUE	Bits 31:0: MSR index	MSR value is incorrect.
0xC0000930	Error	TDX_SEAMREPORT_NOT_AVAILABLE	0	SEAMOPS(SEAMREPORT) instruction leaf is not available.
0xC0000931	Error	TDX_SEAMDB_GETREF_NOT_AVAILABLE	0	SEAMOPS(SEAMDB_GETREF) instruction leaf is not available.
0xC0000932	Error	TDX_SEAMDB_REPORT_NOT_AVAILABLE	0	SEAMOPS(SEAMDB_REPORT) instruction leaf is not available.
0xC0000933	Error	TDX_SEAMVERIFYREPORT_NOT_AVAILABLE	0	SEAMOPS(SEAMVERIFYREPORT) instruction leaf is not available.
0xC0000934	Error	TDX_UNKNOWN_TDSTATE_ENUM	0	SEAMOPS(TDSTATE_ENUM) instruction reported an unknown value.
0xC0000A00	Error	TDX_INVALID_TDMR	Bits 7:0: TDMR index	TDMR base address is not aligned on 1GB, its HKID bits are not
0xC0000A01	Error	TDX_NON_ORDERED_TDMR	Bits 7:0: TDMR index	TDMR is not specified in an ascending, non-overlapping order.
0xC0000A02	Error	TDX_TDMR_OUTSIDE_CMRS	Bits 7:0: TDMR index	TDMR non-reserved parts are not fully contained in CMRs.
0x00000A03	Success	TDX_TDMR_ALREADY_INITIALIZED	0	TDMR is already fully initialized.
0xC0000A10	Error	TDX_INVALID_PAMT	Bits 7:0: TDMR index	PAMT region base address is not aligned on 4KB, its HKID bits
0xC0000A11	Error	TDX_PAMT_OUTSIDE_CMRS	Bits 7:0: TDMR index	PAMT is not fully contained in CMRs.
0xC0000A12	Error	TDX_PAMT_OVERLAP	Bits 7:0: TDMR index	PAMT overlaps with TDMR non-reserved parts or with another
0xC0000A20	Error	TDX_INVALID_RESERVED_IN_TDMR	Bits 7:0: TDMR index	Reserved area in TDMR's base offset is not aligned on 4KB, its
0xC0000A21	Error	TDX_NON_ORDERED_RESERVED_IN_TDMR	Bits 7:0: TDMR index Bits 15:8: Reserved area index	Reserved area in TDMR is not specified in an ascending, non-overlapping order.
0xC0000A22	Error	TDX_CMR_LIST_INVALID	0	CMR list provided to the TDX module is invalid
0xC0000B00	Error	TDX_EPT_WALK_FAILED	Operand ID	EPT walk failed
0xE0000B00	Fatal	TDX_EPT_WALK_FAILED_FATAL	Operand ID	EPT walk failed, TD should be torn down
0xC0000B01	Error	TDX_EPT_ENTRY_FREE	Operand ID	EPT entry is free
0xC0000B02	Error	TDX_EPT_ENTRY_NOT_FREE	Operand ID	EPT entry is not free
0xC0000B03	Error	TDX_EPT_ENTRY_NOT_PRESENT	Operand ID	EPT entry is not present
0xC0000B04	Error	TDX_EPT_ENTRY_NOT_LEAF	Operand ID	EPT entry is not a leaf
0xC0000B05	Error	TDX_EPT_ENTRY_LEAF	Operand ID	EPT entry is a leaf
0xC0000B06	Error	TDX_GPA_RANGE_NOT_BLOCKED	Operand ID	GPA range is not blocked
0x00000B07	Success	TDX_GPA_RANGE_ALREADY_BLOCKED	Operand ID	GPA range is already blocked
0xC0000B08	Error	TDX_TLB_TRACKING_NOT_DONE	Operand ID	TLB tracking has not been done

0xC000B09	Error	TDX_EPT_INVALID_PROMOTE_CONDITIONS	Operand ID	Conditions for GPA mapping promotions as invalid
0x0000B0A	Success	TDX_PAGE_ALREADY_ACCEPTED	Error EPT level	Page has already been accepted
0xC000B0B	Error	TDX_PAGE_SIZE_MISMATCH	Error EPT level	Requested page size does not match the current GPA mapping size
0xC000B0C	Error	TDX_GPA_RANGE_BLOCKED	Operand ID	GPA range is blocked
0xC000B0D	Error	TDX_EPT_ENTRY_STATE_INCORRECT	Operand ID	EPT entry state is incorrect
0xE000B0D	Fatal	TDX_EPT_ENTRY_STATE_INCORRECT_FATAL	Operand ID	EPT entry state is incorrect, TD should be torn down
0xC000B0E	Error	TDX_EPT_PAGE_NOT_FREE	Operand ID	EPT page is not free
0xC000B0F	Error	TDX_L2_SEPT_WALK_FAILED	Bits 15:0: Error EPT level Bits 31:16: VM index	L2 Secure EPT walk failed
0xE000B0F	Fatal	TDX_L2_SEPT_WALK_FAILED_FATAL	Bits 15:0: Error EPT level Bits 31:16: VM index	L2 Secure EPT walk failed, TD should be torn down
0xC000B10	Error	TDX_L2_SEPT_ENTRY_NOT_FREE	Bits 15:0: Error EPT level Bits 31:16: VM index	L2 Secure EPT entry is not free
0xC000B11	Error	TDX_PAGE_ATTR_INVALID	Operand ID	The attributes combination requested for a page is invalid.
0xC000B12	Error	TDX_L2_SEPT_PAGE_NOT_PROVIDED	Operand ID	On TDH.MEM.PAGE.DEMOTE, a new L2 SEPT page was not provided but a page alias exists.
0x8000B13	Recover. Error	TDX_BLOCKED_MEMORY_EXISTS	0	Operation failed because some of the TD's private memory is
0xC000C00	Error	TDX_METADATA_FIELD_ID_INCORRECT	For a single field, set to 0.	The provided FIELD_ID is incorrect.
0xE000C00	Fatal	TDX_METADATA_FIELD_ID_INCORRECT_FATAL	For a single field, set to 0. For a metadata list:	The provided FIELD_ID is incorrect, TD should be torn down.
0xC000C01	Error	TDX_METADATA_FIELD_NOT_WRITABLE	For a single field, set to 0. For a metadata list:	Field code and write mask are for a read-only field.
0xE000C01	Fatal	TDX_METADATA_FIELD_NOT_WRITABLE_FATAL	For a single field, set to 0.	Field code and write mask are for a read-only field, TD should
0xC000C02	Error	TDX_METADATA_FIELD_NOT_READABLE	For a single field, set to 0.	Field code is for an unreadable field.
0xC000C03	Error	TDX_METADATA_FIELD_VALUE_NOT_VALID	For a single field, set to 0.	The provided field value is not valid.
0xE000C03	Fatal	TDX_METADATA_FIELD_VALUE_NOT_VALID_FATAL	For a single field, set to 0.	The provided field value is not valid, TD should be torn down.
0xC000C04	Error	TDX_METADATA_LIST_OVERFLOW	For a single field, set to 0. For a metadata list:	A metadata list does not fit within the provided buffer.
0xE000C04	Fatal	TDX_METADATA_LIST_OVERFLOW_FATAL	For a single field, set to 0. For a metadata list:	A metadata list does not fit within the provided buffer, TD should be torn down.
0xC000C05	Error	TDX_INVALID_METADATA_LIST_HEADER	0	Metadata list header is invalid
0xE000C05	Fatal	TDX_INVALID_METADATA_LIST_HEADER_FATAL	0	Metadata list header is invalid, TD should be torn down.
0xC000C06	Error	TDX_REQUIRED_METADATA_FIELD_MISSING	0	A required metadata field is missing.
0xE000C06	Fatal	TDX_REQUIRED_METADATA_FIELD_MISSING_FATAL	0	A required metadata field is missing, TD should be torn down.
0xC000C07	Error	TDX_METADATA_ELEMENT_SIZE_INCORRECT	For a single field, set to 0.	A metadata field identifier specifies an incorrect
0xC000C08	Error	TDX_METADATA_LAST_ELEMENT_INCORRECT	For a single field, set to 0.	A metadata field identifier specifies an incorrect
0xC000C09	Error	TDX_METADATA_FIELD_CURRENTLY_NOT_WRITABLE	For a single field, set to 0.	The metadata field is currently not writable, e.g., per some
0xC000C0A	Error	TDX_METADATA_WR_MASK_NOT_VALID	For a single field, set to 0.	The write mask value is not valid for the metadata field
0x0000C0B	Success	TDX_METADATA_FIRST_FIELD_ID_IN_CONTEXT	0	Indicates that the first accessible field ID in context is
0x0000C0C	Success	TDX_METADATA_FIELD_SKIP	0	Indicates that the field value being read is not applicable and needs to be skipped.
0xC000C0D	Error	TDX_VIRTUAL_MSR_VALUE_NOT_VALID	Bits 31:0: MSR Index	Virtual MSR value is incorrect.
0xE000C0D	Fatal	TDX_VIRTUAL_MSR_VALUE_NOT_VALID_FATAL	Bits 31:0: MSR Index	Virtual MSR value is incorrect, TD should be torn down.
0xC000C0E	Error	TDX_METADATA_FIELD_NOT_ALLOCATED	For a single field, set to 0. For a metadata list:	The applicable structure allocated in memory has no place to hold the metadata field
0xC000D00	Error	TDX_SERVTD_ALREADY_BOUND_FOR_TYPE	0	A single service TD of this type is supported

0xC0000D01	Error	TDX_SERVTD_TYPE_MISMATCH	0	Service TD type does not match the currently bound type
0xC0000D02	Error	TDX_SERVTD_ATTR_MISMATCH	0	Service TD attributes do not match the currently bound attributes
0xC0000D03	Error	TDX_SERVTD_INFO_HASH_MISMATCH	0	Service TD hash of TDINFO_STRUCT does not match the currently bound hash
0xC0000D04	Error	TDX_SERVTD_UUID_MISMATCH	0	Service TD UUID does not match the currently bound UUID
0xC0000D05	Error	TDX_SERVTD_NOT_BOUND	Binding slot number	Service TD is not bound
0xC0000D06	Error	TDX_SERVTD_BOUND	0	Service TD is already bound
0xC0000D07	Error	TDX_TARGET_UUID_MISMATCH	0	Target TD UUID does not match the requested TD UUID
0xC0000D08	Error	TDX_TARGET_UUID_UPDATED	0	Target TD UUID does not match the requested TD UUID, but pre-
0x80000D09	Recover. Error	TDX_REBIND_TOKEN_MISMATCH	0	Target TD rebind session token does not match the accepted
0x80000D0A	Recover. Error	TDX_SERVTD_EXT_MISMATCH	0	Target TD calculated SERVTD_EXT hash does not match the rebind SERVTD_EXT hash accepted by the new service TD
0xA0000D0A	Fatal	TDX_SERVTD_EXT_MISMATCH_FATAL	0	Target TD calculated SERVTD_EXT hash does not match the rebind SERVTD_EXT hash accepted by the new service TD. TD should be
0x80000D0B	Recover. Error	TDX_SERVTD_INCORRECT_BINDING_STATE	Binding State	Target TD binding state is not in the expected state
0xC0000D0C	Error	TDX_SERVTD_NESTING_NOT_ALLOWED	0	Service TD cannot be bound to another Service TD
0xC0000D0D	Error	TDX_SERVTD_CANNOT_BE_MIGRATABLE	0	Migratable Service TD is not supported
0xC0000E00	Error	TDX_INVALID_MBMD	0	MBMD is invalid
0xE0000E00	Fatal	TDX_INVALID_MBMD_FATAL	0	MBMD is invalid, TD should be torn down.
0xC0000E01	Error	TDX_INCORRECT_MBMD_MAC	0	MBMD.MAC field value is incorrect
0xC0000E01	Fatal	TDX_INCORRECT_MBMD_MAC_FATAL	0	MBMD.MAC field value is incorrect, TD should be torn down.
0xC0000E02	Error	TDX_NOT_WRITE_BLOCKED	Operand ID	Secure EPT entry is not blocked for writing
0x00000E03	Success	TDX_ALREADY_WRITE_BLOCKED	Operand ID	Secure EPT entry is already blocked for writing
0xC0000E04	Error	TDX_NOT_EXPORTED	Operand ID	Secure EPT entry is not marked as exported
0xC0000E05	Error	TDX_MIGRATION_STREAM_STATE_INCORRECT	0	Migration stream has not been initialized or is not enabled
0xC0000E06	Error	TDX_MAX_MIGS_NUM_EXCEEDED	MAX MIGS	The maximum number of supported migration streams has been
0xC0000E07	Error	TDX_EXPORTED_DIRTY_PAGES_REMAIN	0	There are some pages that have been exported, but need to be re-
0xC0000E08	Error	TDX_MIGRATION_DECRYPTION_KEY_NOT_SET	0	A new migration decryption key has not been set before a migration session start is attempted
0xC0000E09	Error	TDX_TD_NOT_MIGRATABLE	0	The TD's ATTRIBUTES.MIGRATABLE bit is not set
0xC0000E0A	Error	TDX_PREVIOUS_EXPORT_CLEANUP_INCOMPLETE	0	A previous aborted export session cleanup (using
0xC0000E0B	Error	TDX_NUM_MIGS_HIGHER_THAN_CREATED	0	The number of migration streams used by the session is higher
0xE0000E0B	Fatal	TDX_NUM_MIGS_HIGHER_THAN_CREATED_FATAL	0	The number of migration streams used by the session is higher
0xC0000E0C	Error	TDX_IMPORT_MISMATCH	0	A re-import or an import cancellation does not match the
0xC0000E0D	Error	TDX_MIGRATION_EPOCH_OVERFLOW	0	Migration epoch has exceeded its maximum value
0xC0000E0E	Error	TDX_MAX_EXPORTS_EXCEEDED	0	Maximum number of TD export attempts (2^31) has been exceeded
0xC0000E0F	Error	TDX_INVALID_PAGE_MAC	Operand ID	Imported page MAC is invalid
0xE0000E0F	Fatal	TDX_INVALID_PAGE_MAC_FATAL	Operand ID	Imported page MAC is invalid, TD should be torn down
0xC0000E10	Error	TDX_MIGRATED_IN_CURRENT_EPOCH	Operand ID	Page already migrated in the current epoch
0xE0000E10	Fatal	TDX_MIGRATED_IN_CURRENT_EPOCH_FATAL	Operand ID	Page already migrated in the current epoch, TD should be torn
0xC0000E11	Error	TDX_DISALLOWED_IMPORT_OVER_REMOVED	Operand ID	Disallowed age import over a previously-removed page
0xC0000E12	Error	TDX_SOME_VCPUS_NOT_MIGRATED	0	Some VCPUs have not been migrated
0xC0000E13	Error	TDX_ALL_VCPUS_IMPORTED	0	Attempting to import a VCPU when all VCPUs have already been
0xE0000E13	Fatal	TDX_ALL_VCPUS_IMPORTED_FATAL	0	Attempting to import a VCPU when all VCPUs have already been
0xC0000E14	Error	TDX_MIN_MIGS_NOT_CREATED	0	The minimum number of migration streams (2) to support
0xC0000E15	Error	TDX_VCPU_ALREADY_EXPORTED	0	The VCPU has already been exported in the current export session
0xC0000E16	Error	TDX_INVALID_MIGRATION_DECRYPTION_KEY	0	The migration decryption key is the same as a previous key or
0x00000E17	Success	TDX_MEM_RANGE_SCAN_SUCCESS	0	Comprehensive scan of the current GPA range (but not the whole
0x00000E18	Success	TDX_MEM_SCAN_SUCCESS	0	Comprehensive scan of the whole TD private GPA address space
0x80000E19	Recover. Error	TDX_MEM_SCAN_FAILED_BLOCKED_RANGE	0	The comprehensive GPA space scan failed because a blocked
0x80000E1A	Recover. Error	TDX_MEM_SCAN_FAILED_OTHER_THREAD	0	A comprehensive GPA space scan failure was detected by
0x80000E1B	Recover. Error	TDX_MEM_SCAN_CONFIG_REQUIRED	0	Comprehensive GPA space scan has not been configured by
0x00000E1C	Success	TDX_MEM_SCAN_ALREADY_SUCCESSFUL	0	The comprehensive GPA space scan is already successful. The
0x80000E1D	Recover. Error	TDX_UNEXPORTED_MEMORY_REMAINS	0	Operation failed because some of the TD's private memory has
0xC0000E1E	Error	TDX_MEM_SCAN_CONFIG_ALREADY_DONE	0	Comprehensive GPA space scan has already been configured by
0x80000E1F	Recover. Error	TDX_MEM_SCAN_IN_PROGRESS	0	Comprehensive GPA space scan is in progress
0xC0000E20	Error	TDX_BLOCKING_DISALLOWED	0	Memory blocking is not allowed
0x80000E21	Recover. Error	TDX_MEM_SCAN_DCHECK_NOT_DONE	0	A comprehensive GPA space scan by TDH.COMP.SCAN.COMP(DCHECK) has not completed successfully for this export session
0xC0000E22	Error	TDX_INCOMPATIBLE_MBMD_MAC_CONTEXT	0	Crypto context saved when the migration function was interrupted is incompatible with the current TDX module
0xE0000E23	Fatal	TDX_INCOMPATIBLE_EXPORT_MODE_TD_NON_ACCESSIBL	0	Attempt to use a TD that has been migrated in write-blocking
0xC0000E24	Error	TDX_REOWN_DISALLOWED	GPA list entry index	TDH.IMPORT.MEM operation attempted to change physical page
0xE0000E24	Fatal	TDX_REOWN_DISALLOWED_FATAL	GPA list entry index	TDH.IMPORT.MEM operation attempted to change physical page
0xC0000F00	Error	TDX_IOMMU_INVALID_STATE	Operand ID	IOMMU state is not valid for the operation
0x80000F01	Recover. Error	TDX_IOMMU_IQ_FULL	Operand ID	IOMMU invalidation queue is full
0xC0000F02	Error	TDX_IOMMU_RP_NOT_CONFIGURED	Operand ID	Root port is not configured
0xC0000F03	Error	TDX_IOMMU_IOTLB_TRACKING_NOT_DONE	Operand ID	IOMMU IOTLB tracking is not done
0xC0000F04	Error	TDX_IOMMU_RP_IDE_MUST_BE_DISABLED	Operand ID	Root port configuration failed because IDE must be disabled
0xC0000F05	Error	TDX_SPDM_HAS_ACTIVE_IDE_STREAMS	Operand ID	SPDM sessions has associated active IDE streams
0xC0000F06	Error	TDX_SPDM_INVALID_STATE	Operand ID	SPDM state is not valid for the operation
0xC0000F07	Error	TDX_DMAR_INVALID_MAPPING_STATE	Operand ID	DMAR mapping state is not valid for the operation
0xC0000F08	Error	TDX_DMAR_INVALID_INV_STATE	Operand ID	DMAR invalidation state is not valid for the operation
0xC0000F09	Error	TDX_TDI_PKH_MISMATCH	Operand ID	TDI public key hash mismatch
0xC0000F0F	Error	TDX_TDI_TDISP_INVALID_MESSAGE	Operand ID	TDISP request/response has an invalid or unsupported format
0xC0000F10	Error	TDX_TDI_TDISP_INVALID_STATE	Operand ID	TDISP state is not valid for the operation
0xC0000F11	Error	TDX_TDI_INVALID_STATE	Operand ID	TDI state is not valid for the operation
0xC0000F13	Error	TDX_TDI_HAS_MAPPED_MMIO	Operand ID	TDI has mapped MMIO pages
0xC0000F17	Error	TDX_IDE_STREAM_NOT_SUPPORTED	Operand ID	IDE streams not supported by this platform
0xC0000F18	Error	TDX_IDE_STREAM_NOT_CONFIGURED	Operand ID	IDE stream is not configured
0xC0000F1A	Error	TDX_IDE_STREAM_NOT_BLOCKED	Operand ID	IDE stream is not blocked
0xC0000F1B	Error	TDX_IDE_STREAM_ADDR_OVERLAP	Operand ID	IDE stream address range overlaps with another (configured IDE
0xC0000F1C	Error	TDX_IDE_STREAM_RID_OVERLAP	Operand ID	IDE stream RID range overlaps with another (configured IDE

0xC000F1F	Error	TDX_IDE_STREAM_HAS_DEVICE_INTERFACES	Operand ID	IDE stream is associated with device interfaces
0xC000F21	Error	TDX_IDE_STREAM_IDEKM_KEYS_NOT_READY	Operand ID	IDE key management protocol keys not ready
0xC000F23	Error	TDX_IDE_STREAM_IDEKM_INVALID_RESPONSE	Operand ID	IDE key management invalid response
0xC000F24	Error	TDX_IDE_STREAM_INVALID_STATE	Operand ID	IDE stream invalid state
0xC000F25	Error	TDX_MMIO_INVALID_PAGE_METADATA	Operand ID	Invalid MMIO page metadata
0xC000F26	Error	TDX_MMIO_ACCEPT_SIZE_MISMATCH	Operand ID	MMIO accept page size mismatch
0xC000F27	Error	TDX_MMIO_TDI_OWNER_MISMATCH	Operand ID	MMIO TDI owner mismatch
0xC000F38	Error	TDX_DMAR_INDEX_OUT_OF_BOUNDS	Operand ID	DMAR exceeds table bounds
0xC000F39	Error	TDX_DMAR_ENTRY_NOT_PRESENT	Operand ID	DMAR entry is not present
0xC000F3A	Error	TDX_TD_HAS_ATTACHED_DEVICES	Operand ID	TD has attached devices
0x0000F3B	Success	TDX_IOMMU_IOTLB_TRACKING_NOT_REQUIRED	Operand ID	IOTLB invalidation and tracking is not required
0xC000F3E	Error	TDX_IOMMU_KCB_MUST_BE_DISABLED	Operand ID	IOMMU configuration failed because KCB must be disabled
0xC000F3F	Error	TDX_TDI_HAS_MAPPED_DMA	Operand ID	TDI can't be released because DMA is still mapped
0xC000F40	Error	TDX_TDIMT_NOT_PRESENT	Operand ID	TDI metadata entry is not present
0xC000F41	Error	TDX_TDI_INVALID_METADATA	Operand ID	Invalid TDI metadata entry
0xC000F42	Error	TDX_TDIMT_ALREADY_PRESENT	Operand ID	TDI metadata entry is already present
0xC000F44	Error	TDX_SPDM_ENTRY_NOT_PRESENT	Operand ID	SPDM entry not found
0xC000F45	Error	TDX_SPDM_SESSION_KEY_REQUIRE_REFRESH	Operand ID	SPDM session requires a key
0xC000F46	Error	TDX_CONNECT_INVALID_STATE	0	Invalid TDX Connect preserving state
0xC000F47	Error	TDX_MMIO_MT_NOT_PRESENT	Operand ID	MMIO metadata entry is not present
0xC000F48	Error	TDX_IOMMU_RP_INVALID_CONFIGURATION	Operand ID	Invalid configuration in RP configuration registers
0xC000F49	Error	TDX_TDI_INVALID_TDI_CONFIGURATION	Operand ID	The device interface configuration is not supported by TDX
0xC000F4B	Error	TDX_TDI_TDISP_INVALID_REPORT	Operand ID	TDI report is incomplete or invalid
0xC000F4C	Error	TDX_MMIO_PAGE_NOT_IN_ASSOC_RANGE	Operand ID	MMIO page is not in RP association range
0xC000F4D	Error	TDX_MMIO_INVALID_HPA_OFFSET	Operand ID	MMIO page address has invalid added offset
0xC000F4E	Error	TDX_SPDM_INVALID_MESSAGE	Operand ID	SPDM message is invalid
0xC000F4F	Error	TDX_TPR_INVALID_STATE	TPR index	TPR ranges must be disabled
0xC000F50	Error	TDX_SMRR_OVERLAPS_IO_RANGE	SMRR index	SMRR overlaps I/O range
0x8000F51	Recover. Error	TDX_IOMMU_ECMD_TIMEOUT	Operand ID	Configure/Clear_IOMMU has not completed. Host must retry.
0x8000F52	Recover. Error	TDX_IOMMU_ECMD_ERROR	Operand ID	Configure/Clear_IOMMU failed. Host may retry.
0x0000F53	Success	TDX_GUEST_INV_NOT_REQUIRED	0	Guest invalidation is not required
0xC000F54	Error	TDX_GUEST_INV_IN_PROGRESS	0	Previous TD invalidation request is in progress
0xC000F55	Error	TDX_GUEST_INV_INVALID_DESC	Entry index	Invalid invalidation descriptor in TD request
0x0000F57	Success	TDX_SPDM_REQUEST	0	An SPDM request message was generated. The TDX Module is waiting for the corresponding SPDM response message in the next SEAMCALL invocation.
0xC000F58	Error	TDX_NO_FREE_SPDM_SESSIONS	Operand ID	All SPDM sessions are in use.
0xC000F59	Error	TDX_TDI_IRH_MISMATCH	Operand ID	TDI report hash mismatch
0xC000F5A	Error	TDX_TDISP_ERROR	0	An error was reported by the device in its TDISP response
0xC000F5B	Error	TDX_NO_FREE_IDE_KEYS	0	All IDE stream key slots are in use.
0xC000F5C	Error	TDX_TPR_RANGE_ENABLED	0	TPR Ranges must be disabled
0xC000F5D	Error	TDX_SPDM_NEEDS_ABORT	0	SPDM session needs to be aborted to block the IDE stream with TDIs in RUN state
0xC000F5E	Error	TDX_SPDM_MESSAGE_ERROR	0	An SPDM error message was returned, the SPDM session
0xC000F5F	Error	TDX_TDISP_MESSAGE_ERROR	0	A TDISP error message was returned, the SPDM session
0xC000F60	Error	TDX_TDI_TDISP_OUT_REQ	0	A TDISP response message for a different TDISP operation is
0xC000F61	Error	TDX_MMIO_STILL_MAPPED	0	All MMIO must be unmapped before PASIDTE DMAR block
0xC000F62	Error	RESERVED	0	0
0xC000F63	Error	TDX_CONNECT_INCORRECT_TD_CONFIG	0	TD configuration is incompatible with TDX Connect
0x8000F64	Recover. Error	TDX_MAX_IDE_STREAMS_PER_SPDM_EXCEEDED	0	Max supported IDE Streams per SPDM session exceeded
0xC000F65	Error	TDX_GFUNCTION_ID_ALREADY_EXISTS	0	Guest Function ID already assigned to another TDI
0xC000F66	Error	TDX_MAX_TDI_COUNT_REACHED	0	Max number of TDIs per TD (TDX_MAX_TDI_PER_TD ) reached
0x0000F67	Success	TDX_MMIO_ACCEPT_REQUEST	0	TD Exit: Request from the host VM to map an MMIO page.
0x0000F68	Success	TDX_TD_INV_REQUEST	0	TD has requested IOTLB/DMAR invalidation
0xC001000	Error	TDX_INVALID_CPUSVN	0	REPORTMACSTRUCT.CPUSVN is invalid
0xC001001	Error	TDX_INVALID_REPORTMACSTRUCT	0	REPORTMACSTRUCT is invalid
0xC001002	Error	TDX_TDG_MR_REPORT_VERSION_MISMATCH	0	TDG.MR.REPORT was called with a version number that doesn't
0xC001003	Error	TDX_INSUFFICIENT_TDREPORT_SPACE	0	TDG.MR.REPORT was provided with a buffer space that is too
0xC001004	Error	TDX_MR_KEY_GET_NOT_SUPPORTED	0	TDG.MR.KEY.GET is not supported for this TD (e.g., it is
0xC001005	Error	TDX_TDSIGSTRUCT_MISMATCH	0	One of the reference measurements in the TDSIGSTRUCT did not
0xC001006	Error	TDX_SVN_INVALID	0	Requested SVN is invalid for current configuration
0x0001100	Success	TDX_L2_EXIT_HOST_ROUTED_ASYNC	For TDG.VP.ENTER: Exit Reason	L1-to-L2 entry succeeded. Later, following an asynchronous TD
0x0001101	Success	TDX_L2_EXIT_HOST_ROUTED_TDVMCALL	For TDG.VP.ENTER: Exit Reason	L1-to-L2 entry succeeded. Later, following a TDG.VP.VMCALL TD
0x0001102	Success	TDX_L2_EXIT_PENDING_INTERRUPT	For TDG.VP.ENTER: Exit Reason	L1-to-L2 entry succeeded, and later L2-to-L1 exit happened due
0x8001103	Recover. Error	TDX_L2_VM_ENTRY_FAILED	For TDG.VP.ENTER: Exit Reason	L2 VM entry failed due to incorrect setting of L2 VMCS.
0x0001104	Success	TDX_L2_EXIT_PENDING_INTERRUPT_TDVMCALL	For TDG.VP.ENTER: Exit Reason	L1-to-L2 entry succeeded. Later, following a TDG.VP.VMCALL TD
0x0001120	Success	TDX_PENDING_INTERRUPT	0	L1-to-L2 entry was aborted because an interrupt is pending for
0x0001140	Success	TDX_TD_EXIT_BEFORE_L2_ENTRY	0	A debuggable TD's L1-to-L2 entry was mutated to a TD exit
0x0001141	Success	TDX_TD_EXIT_ON_L2_VM_EXIT	Exit Reason	A debuggable TD's VM exit from L2 was mutated to a TD exit
0x0001142	Success	TDX_TD_EXIT_ON_L2_TO_L1	Exit Reason	A debuggable TD's L2-to-L1 entry was mutated to a TD exit
0xC001160	Error	TDX_GLA_NOT_CANONICAL	0	Guest linear address is not canonical
0xC001200	Error	TDX_EXT_FATAL_ERROR	Bits 15:0: Extension Error Code	TDX Module Extension fatal error, TDX module reinstall is
0x8001201	Recover. Error	TDX_EXT_MEMORY_POOL_NOT_READY	0	TDH.EXT.INIT was called before the TDX Module Extension memory
0x8001202	Recover. Error	TDX_EXT_MEMORY_POOL_NOT_PENDING	0	TDH.EXT.MEM.ADD was called but extension state is not memory
0x0001203	Success	TDX_EXT_MEMORY_POOL_FULL	0	The TDX Memory Extension memory pool is full
0x8001204	Recover. Error	TDX_EXT_NOT_INITIALIZED	0	TDX Extension was not initialized
0x8001205	Recover. Error	TDX_EXT_NOT_READY	Extension ID	TDX Extension not ready
0x0001206	Success	TDX_PREV_FEATURES_ENABLED	0	Previous enabled features are ready.
0xC001207	Error	TDX_NO_ASSOCIATED_TD	0	The current NRX Module VCPU has not been called in the context
0x0001300	Success	TDX_IPI_REQUEST	VCPU_INDEX	The TD VCPU has requested an IPI to a VCPU which is currently

0xC0001301	Error	TDX_ENHANCED_INTR_VIRT_CONFIGURED	0	The host VMM attempted to directly configure the TD VMCS' virtual interrupt controls after enhanced interrupt virtualization mode had already been configured.
0xC0001302	Error	TDX_LEGACY_INTR_VIRT_CONFIGURED	0	The host VMM attempted to configure enhanced interrupt
0xC0001303	Error	TDX_INTR_VIRT_CONFIG_ALREADY_DONE	VM index	Interrupt virtualization has already been configured.
0xC0001304	Error	TDX_VCPU_ALREADY_IMPORTED	0	This operation must be done before any VCPU state is imported.
0xC0001305	Error	TDX_INTR_VIRT_RECONFIG_NOT_DONE	VM index	On import, interrupt virtualization re-configuration by
0xC0001306	Error	TDX_PIDPT_SIZE_TOO_SMALL	Bits 15:0: VM index	The host VMM provided too few PIDPT pages when reconfiguring
0xC0001307	Error	TDX_SEC_PID_NOT_ENABLED	VM index	The host VMM did not enable Secure PID when reconfiguring interrupt virtualization on import, but the imported TD's Secure PID is enabled.
0xC0001308	Error	TDX_NV_NOT_UNIQUE	Bits 15:0: Other VM index	The notification vector configured for this VCPU in is not
0xC0001309	Error	TDX_PID_MODE_IMPORT_MISMATCH	VM index	The host VMM did not configure PID MODE correctly when