

## TPM V1.2 Error Code Cheat Sheet

Error	V1.1B	(Dec)	(Hex)	Description
TPM_SUCCESS	O	0	0x 00000000	Successful completion of the operation
TPM_AUTHFAIL	O	1	0x 00000001	Authentication failed
TPM_BADINDEX	O	2	0x 00000002	The index to a PCR, DIR or other register is incorrect
TPM_BAD_PARAMETER	O	3	0x 00000003	One or more parameter is bad
TPM_AUDITFAILURE	O	4	0x 00000004	An operation completed successfully but the auditing of that operation failed.
TPM_CLEAR_DISABLED	O	5	0x 00000005	The clear disable flag is set and all clear operations now require physical access
TPM_DEACTIVATED	O	6	0x 00000006	The TPM is deactivated
TPM_DISABLED	O	7	0x 00000007	The TPM is disabled
TPM_DISABLED_CMD	O	8	0x 00000008	The target command has been disabled
TPM_FAIL	O	9	0x 00000009	The operation failed
TPM_BAD_ORDINAL	O	10	0x 0000000A	The ordinal was unknown or inconsistent
TPM_INSTALL_DISABLED	O	11	0x 0000000B	The ability to install an owner is disabled
TPM_INVALID_KEYHANDLE	O	12	0x 0000000C	The key handle can not be interpreted
TPM_KEYNOTFOUND	O	13	0x 0000000D	The key handle points to an invalid key
TPM_INAPPROPRIATE_ENC	O	14	0x 0000000E	Unacceptable encryption scheme
TPM_MIGRATEFAIL	O	15	0x 0000000F	Migration authorization failed
TPM_INVALID_PCR_INFO	O	16	0x 00000010	PCR information could not be interpreted
TPM_NOSPACE	O	17	0x 00000011	No room to load key.
TPM_NOSRK	O	18	0x 00000012	There is no SRK set
TPM_NOTSEALED_BLOB	O	19	0x 00000013	An encrypted blob is invalid or was not created by this TPM
TPM_OWNER_SET	O	20	0x 00000014	There is already an Owner
TPM_RESOURCES	O	21	0x 00000015	The TPM has insufficient internal resources to perform the requested action.
TPM_SHORTRANDOM	O	22	0x 00000016	A random string was too short
TPM_SIZE	O	23	0x 00000017	The TPM does not have the space to perform the operation.
TPM_WRONGPCRVAL	O	24	0x 00000018	The named PCR value does not match the current PCR value.
TPM_BAD_PARAM_SIZE	O	25	0x 00000019	The paramSize argument to the command has the incorrect value
TPM_SHA_THREAD	O	26	0x 0000001A	There is no existing SHA-1 thread.
TPM_SHA_ERROR	O	27	0x 0000001B	The calculation is unable to proceed because the existing SHA-1 thread has already encountered an error.
TPM_FAILEDSELFTST	O	28	0x 0000001C	Self-test has failed and the TPM has shutdown.
TPM_AUTH2FAIL	O	29	0x 0000001D	The authorization for the second key in a 2 key function failed authorization
TPM_BADTAG	O	30	0x 0000001E	The tag value sent to for a command is invalid
TPM_IOERROR	O	31	0x 0000001F	An IO error occurred transmitting information to the TPM
TPM_ENCRYPT_ERROR	O	32	0x 00000020	The encryption process had a problem.
TPM_DECRYPT_ERROR	O	33	0x 00000021	The decryption process did not complete.
TPM_INVALID_AUTHHANDLE	O	34	0x 00000022	An invalid handle was used.
TPM_NO_ENDORSEMENT	O	35	0x 00000023	The TPM does not have an EK installed
TPM_INVALID_KEYUSAGE	O	36	0x 00000024	The usage of a key is not allowed
TPM_WRONG_ENTITYTYPE	O	37	0x 00000025	The submitted entity type is not allowed
TPM_INVALID_POSTINIT	O	38	0x 00000026	The command was received in the wrong sequence relative to TPM_Init and a subsequent TPM_Startup
TPM_INAPPROPRIATE_SIG	O	39	0x 00000027	Signed data cannot include additional DER information
TPM_BAD_KEY_PROPERTY	O	40	0x 00000028	The key properties in TPM_KEY_PARMS are not supported by this TPM
TPM_BAD_MIGRATION	O	41	0x 00000029	The migration properties of this key are incorrect.
TPM_BAD_SCHEME	O	42	0x 0000002A	The signature or encryption scheme for this key is incorrect or not permitted in this situation.
TPM_BAD_DATASIZE	O	43	0x 0000002B	The size of the data (or blob) parameter is bad or inconsistent with the referenced key
TPM_BAD_MODE	O	44	0x 0000002C	A mode parameter is bad, such as capArea or subCapArea for TPM_GetCapability, physicalPresence parameter for TPM_PhysicalPresence, or migrationType for TPM_CreateMigrationBlob.
TPM_BAD_PRESENCE	O	45	0x 0000002D	Either the physicalPresence or physicalPresenceLock bits have the wrong value
TPM_BAD_VERSION	O	46	0x 0000002E	The TPM cannot perform this version of the capability
TPM_NO_WRAP_TRANSPORT	O	47	0x 0000002F	The TPM does not allow for wrapped transport sessions
TPM_AUDITFAIL_UNSUCCESSFUL	O	48	0x 00000030	TPM audit construction failed and the underlying command was returning a failure code also
TPM_AUDITFAIL_SUCCESSFUL	O	49	0x 00000031	TPM audit construction failed and the underlying command was returning success
TPM_NOTRESETABLE	O	50	0x 00000032	Attempt to reset a PCR register that does not have the resettable attribute
TPM_NOTLOCAL	O	51	0x 00000033	Attempt to reset a PCR register that requires locality and locality modifier not part of command transport
TPM_BAD_TYPE	O	52	0x 00000034	Make identity blob not properly typed
TPM_INVALID_RESOURCE	O	53	0x 00000035	When saving context identified resource type does not match actual resource
TPM_NOTFIPS	O	54	0x 00000036	The TPM is attempting to execute a command only available when in FIPS mode
TPM_INVALID_FAMILY	O	55	0x 00000037	The command is attempting to use an invalid family ID
TPM_NO_NV_PERMISSION	O	56	0x 00000038	The permission to manipulate the NV storage is not available
TPM_REQUIRES_SIGN	O	57	0x 00000039	The operation requires a signed command
TPM_KEY_NOTSUPPORTED	O	58	0x 0000003A	Wrong operation to load an NV key
TPM_AUTH_CONFLICT	O	59	0x 0000003B	NV_LoadKey blob requires both owner and blob authorization
TPM_AREA_LOCKED	O	60	0x 0000003C	The NV area is locked and not writable
TPM_BAD_LOCALITY	O	61	0x 0000003D	The locality is incorrect for the attempted operation
TPM_READ_ONLY	O	62	0x 0000003E	The NV area is read only and can't be written to
TPM_PER_NOWRITE	O	63	0x 0000003F	There is no protection on the write to the NV area
TPM_FAMILYCOUNT	O	64	0x 00000040	The family count value does not match
TPM_WRITE_LOCKED	O	65	0x 00000041	The NV area has already been written to
TPM_BAD_ATTRIBUTES	O	66	0x 00000042	The NV area attributes conflict
TPM_INVALID_STRUCTURE	O	67	0x 00000043	The structure tag and version are invalid or inconsistent
TPM_KEY_OWNER_CONTROL	O	68	0x 00000044	The key is under control of the TPM Owner and can only be evicted by the TPM Owner.
TPM_BAD_COUNTER	O	69	0x 00000045	The counter handle is incorrect
TPM_NOT_FULLWRITE	O	70	0x 00000046	The write is not a complete write of the area
TPM_CONTEXT_GAP	O	71	0x 00000047	The gap between saved context counts is too large
TPM_MAXNVWRITES	O	72	0x 00000048	The maximum number of NV writes without an owner has been exceeded
TPM_NOOPERATOR	O	73	0x 00000049	No operator AuthData value is set
TPM_RESOURCEMISSING	O	74	0x 0000004A	The resource pointed to by context is not loaded
TPM_DELEGATE_LOCK	O	75	0x 0000004B	The delegate administration is locked
TPM_DELEGATE_FAMILY	O	76	0x 0000004C	Attempt to manage a family other than the delegated family
TPM_DELEGATE_ADMIN	O	77	0x 0000004D	Delegation table management not enabled
TPM_TRANSPORT_NOTEXCLUSIVE	O	78	0x 0000004E	There was a command executed outside of an exclusive transport session
TPM_OWNER_CONTROL	O	79	0x 0000004F	Attempt to context save a owner evict controlled key
TPM_DAA_RESOURCES	O	80	0x 00000050	The DAA command has no resources available to execute the command
TPM_DAA_INPUT_DATA0	O	81	0x 00000051	The consistency check on DAA parameter inputData0 has failed.
TPM_DAA_INPUT_DATA1	O	82	0x 00000052	The consistency check on DAA parameter inputData1 has failed.
TPM_DAA_ISSUER_SETTINGS	O	83	0x 00000053	The consistency check on DAA_issuerSettings has failed.
TPM_DAA_TPM_SETTINGS	O	84	0x 00000054	The consistency check on DAA_tpmSpecific has failed.
TPM_DAA_STAGE	O	85	0x 00000055	The atomic process indicated by the submitted DAA command is not the expected process.
TPM_DAA_ISSUER_VALIDITY	O	86	0x 00000056	The issuer's validity check has detected an inconsistency
TPM_DAA_WRONG_W	O	87	0x 00000057	The consistency check on w has failed.
TPM_BAD_HANDLE	O	88	0x 00000058	The handle is incorrect
TPM_BAD_DELEGATE	O	89	0x 00000059	Delegation is not correct
TPM_BADCONTEXT	O	90	0x 0000005A	The context blob is invalid
TPM_TOOMANYCONTEXTS	O	91	0x 0000005B	Too many contexts held by the TPM
TPM_MA_TICKET_SIGNATURE	O	92	0x 0000005C	Migration authority signature validation failure
TPM_MA_DESTINATION	O	93	0x 0000005D	Migration destination not authenticated
TPM_MA_SOURCE	O	94	0x 0000005E	Migration source incorrect
TPM_MA_AUTHORITY	O	95	0x 0000005F	Incorrect migration authority
TPM_PERMANENTEK	O	97	0x 00000061	Attempt to revoke the EK and the EK is not revocable
TPM_BAD_SIGNATURE	O	98	0x 00000062	Bad signature of CMK ticket
TPM_NOCONTEXTSPACE	O	99	0x 00000063	There is no room in the context list for additional contexts
TPM_RETRY	O	2048	0x 00000800	The TPM is too busy to respond to the command immediately, but the command could be resubmitted at a later time. The TPM MAY return TPM_RETRY for any command at any time.
TPM_NEEDS_SELFTEST	O	2049	0x 00000801	TPM.ContinueSelfTest has not been run.
TPM_DOING_SELFTEST	O	2050	0x 00000802	The TPM is currently executing the actions of TPM.ContinueSelfTest because the ordinal required resources that have not been tested.
TPM_DEFEND_LOCK_RUNNING	O	2051	0x 00000803	The TPM is defending against dictionary attacks and is in some time-out period.