## Original Table 4-1 (from Part 1)

### Table 4-1 Request Packet Type to Transaction Type Cross Reference

| Request Packet Format Type | Transaction Type | Definition | Document Section No. |
|---|---|---|---|
| Type 0 | Implementation-defined | Defined by the device implementation | Section 4.1.3 |
| Type 1 | — | Reserved | Section 4.1.4 |
| Type 2 | ATOMIC set | Read-write 1s to specified address | Section 4.1.5 |
| | ATOMIC clear | Read-write 0s to specified address | |
| | ATOMIC increment | Read-increment-write to specified address | |
| | ATOMIC decrement | Read-decrement-write to specified address | |
| | NREAD | Read specified address | |
| Type 3-4 | — | Reserved | Section 4.1.6 |
| Type 5 | ATOMIC test-and-swap | Read-test=0-swap-write to specified address | Section 4.1.7 |
| | ATOMIC swap | Read-write to specified address | |
| | ATOMIC compare-and-swap | Read-test=first data-write second data to specified address | |
| | NWRITE | Write specified address | |
| | NWRITE_R | Write specified address, notify source of completion | |
| Type 6 | SWRITE | Write specified address | Section 4.1.8 |
| Type 7 | — | Reserved | Section 4.1.9 |
| Type 8 | MAINTENANCE | Read or write device configuration registers and perform other system maintenance tasks | Section 4.1.10 |
| Type 9-11 | — | Reserved | Section 4.1.11 |

## Reagan's Suggested Changes to Table 4-1 (from Part 1)

| ftype | Description | ttype | Description | Payload |
|---|---|---|---|---|
| 0 | Implementation-Defined | | | |
| 1 | Intervention-Request Class | 0 | READ_OWNER | No |
| | | 1 | READ_TO_OWN_OWNER | |
| | | 2 | IO_READ_OWNER | |
| | | 3-15 | Reserved | |
| 2 | Request class | 0 | READ_HOME | No |
| | | 1 | READ_TO_OWN_HOME | |
| | | 2 | IO_READ_HOME | |
| | | 3 | DKILL_HOME | |
| | | 4 | NREAD transaction | |
| | | 5 | IKILL_HOME | |
| | | 6 | TLBIE | |
| | | 7 | TLBSYNC | |
| | | 8 | IREAD_HOME | |
| | | 9 | FLUSH without data | |
| | | 10 | IKILL_SHARER | |
| | | 11 | DKILL_SHARER | |
| | | 12 | ATOMIC inc: post-increment the data | |
| | | 13 | ATOMIC dec: post-decrement the data | |
| | | 14 | ATOMIC set: set the data (write 0b11111...) | |
| | | 15 | ATOMIC clr: clear the data (write 0b00000...) | |
| 3 | Reserved | | | |
| 4 | Reserved | | | |
| 5 | Write Class | 0 | CASTOUT | Yes |
| | | 1 | FLUSH with data | |
| | | 2-3 | Reserved | |
| | | 4 | NWRITE transaction | |
| | | 5 | NWRITE_R transaction | |

| ftype | Description | ttype | Description | Payload |
|---|---|---|---|---|
| | | 6-11 | Reserved | |
| | | 12 | ATOMIC swap: read and return the data, unconditionally write with supplied data. | |
| | | 13 | ATOMIC compare-and-swap: read and return the data, if the read data is equal to the first 8 bytes of data payload, write the second 8 bytes of data to the memory location | |
| | | 14 | ATOMIC test-and-swap: read and return the data, compare to 0, write with supplied data if compare is true | |
| | | 15 | Reserved | |
| 6 | Streaming-Write Class | N/A | | Yes |
| 7 | Flow Control Class | N/A | | No |
| 8 | Maintenance Class | 0 | Maintenance read request | No |
| | | 1 | Maintenance write request | Yes |
| | | 2 | Maintenance read response | Yes |
| | | 3 | Maintenance write response | No |
| | | 4 | Maintenance port-write request | Yes |
| | | 5-15 | Reserved | |
| 9 | Data-Streaming Class | N/A | | Yes |
| 10 | Doorbell Class | N/A | | Yes |
| 11 | Message Class | N/A | | Yes |
| 12 | Reserved | | | |
| 13 | Response Class | 0 | RESPONSE transaction with no data payload, including DOORBELL response | No |
| | | 1 | MESSAGE RESPONSE transaction | No |
| | | 2-7 | Reserved | |
| | | 8 | RESPONSE transaction with data payload | Yes |
| | | 9-15 | Reserved | |
| 14 | Reserved | | | |
| 15 | Implementation-Defined | | | |