Router Records

|  |  |
| --- | --- |
| Router Record (4 Bytes) | |
| 2 Bytes | 2 Bytes |
| Routing as Source | Routing as Target |

PACKETS

|  |  |  |
| --- | --- | --- |
| TYPE | ADDRESS | DATA |
| 1 Byte | 2 Bytes | 4 Bytes |
| Type of Packet | Source/Destination Address | Payload |

|  |  |  |
| --- | --- | --- |
| TYPE | ADDRESS | DATA |
| Action Potential | Source Neuron Address | Neuron Axon State |
| 1 Byte | 2 Bytes | 4 Bytes |
| 0x00 | Any Valid Address | 1 for action potential  0 for no action potential |

|  |  |  |  |
| --- | --- | --- | --- |
| TYPE | ADDRESS | DATA | |
| Synapse Activity | Target Neuron Address | Source Synapse Address | Synaptic Weight |
| 1 Byte | 2 Bytes | 2 Bytes | 2 Bytes |
| 0x01 | Any Valid Address | Any Valid Address | Any valid signed 16bit integer |

|  |  |  |
| --- | --- | --- |
| TYPE | ADDRESS | DATA |
| Enable Control | Target Address | Enable State |
| 1 Byte | 2 Byte | 4 Bytes |
| 0x02 | Any Valid Address | 1 For enabled  0 For disabled |

|  |  |  |
| --- | --- | --- |
| TYPE | ADDRESS | DATA |
| Programming | Target Address | Payload |
| 1 Byte | 2 Byte | 4 Bytes |
| 0xF0 | Any Valid Address | Programming DWORD 0 |
| 0xF1 | Programming DWORD 1 |
| 0xF2 | Programming DWORD 2 |
| 0xF3 | Programming DWORD 3 |
| 0xF4 | Programming DWORD 4 |
| 0xF5 | Programming DWORD 5 |
| 0xF6 | Programming DWORD 6 |
| 0xF7 | Programming DWORD 7 |
| 0xF8 | Programming DWORD 8 |
| 0xF9 | Programming DWORD 9 |
| 0xFA | Programming DWORD 10 |
| 0xFB | Programming DWORD 11 |
| 0xFC | Programming DWORD 12 |
| 0xFD | Programming DWORD 13 |
| 0xFE | Programming DWORD 14 |
| 0xFF | Programming DWORD 15 |