



FIGURE e6.10.4 Time to send an object broken into transmit driver and NIC hardware time vs. receive driver and NIC hardware time. NIC transmit time is much larger than the NIC receive time because transmit requires more PCIe round-trips. The NIC does PCIe reads to read the descriptor and data, but on receive the NIC does PCIe writes of data, length of data, and interrupt. PCIe reads incur a round trip latency because NIC waits for the reply, but PCIe writes require no response because PCIe is reliable, so PCIe writes can be sent back-to-back.