

Error messages and warnings possible for the ncRead and ncReadmult functions with NI-CAN 2.3.2

1. category: Performance errors, difficult to fix because performance border has reached

-1074388990	0xBFF62002	An internal error occurred in the NI-CAN driver. A description is located in the file NicanErr.txt in your Windows folder. Solutions: Email or fax the NicanErr.txt file to National Instruments for technical support.
-1074388952	0xBFF62028	Overflow in the lower level read queue of the CAN card (frames lost). NI-CAN reads this queue at Windows interrupt-time. Solutions: Avoid tasks that generate excessive interrupts on your PC (mouse, ethernet, ...); Avoid running other applications during your test (screen savers, MAX, ...); use Series 2 Filter Mode to filter incoming traffic; For CAN Objects (Frame API), increase read queue length or call Read more frequently.
-1074388920	0xBFF62048	Overflow in the CAN communication chip. This error occurs when frames are received back-to-back for long periods. Solutions: Set Series 2 Filter Mode to filter out frames; Dedicate entire CAN card to receive high busload (transmit with 2nd card, receive another network with 2nd card instead and 2nd port).
-1074388888	0xBFF62068	Intermediate receive queue overflow. This queue holds frames as they are transferred from the CAN chip into object read queues. Solutions: Set Net Interface mask and comparators to filter out frames; Reduce overall bus traffic.
-1074388733	0xBFF62103	The CAN card's firmware no longer responds to commands from the Windows driver, usually due to frequent CAN or timer interrupts. Solutions: Use comparator/mask (filter) properties to reduce received traffic.
-1074388699	0xBFF62125	NI-CAN copies received CAN frames from the card to a large kernel-level queue. There is one queue for each interface (port). If your application does not read fast enough to empty this queue over time, the newest frames are lost. Solutions: Call Read more frequently (such as by reducing user-interface code); Avoid running other applications during your test (screen savers, MAX, ...); use Series 2 Filter Mode to filter incoming traffic.

2. category: Communication error mostly caused by hardware/cable problems.

-1074388981	0xBFF6200B	CAN bus problems caused all communications to stop. This error corresponds to CAN Bus Off state. Solutions: Verify that cabling is correct, devices are connected and operational, and proper bus power is applied.
-1074388959	0xBFF62021	The watchdog timeout for a CAN Object expired, indicating that data was not received at the rate expected. Solutions: Verify your cable connections and operation of remote devices; Increase the Period of the CAN Object.

-1074388949	0xBFF6202B	CAN bus problems (stuff error) caused all communications to stop. This error corresponds to CAN Bus Off state. Solutions: Verify that cabling is correct, devices are connected and operational, and proper bus power is applied.
-1074388917	0xBFF6204B	CAN bus problems (bad frame format) caused all communications to stop. This error corresponds to CAN Bus Off state. Solutions: Verify that cabling is correct, devices are connected and operational, and that proper bus power is applied.
-1074388885	0xBFF6206B	CAN bus problems (no ack) caused all communications to stop. This error corresponds to CAN Bus Off state. Solutions: Verify that cabling is correct, devices are connected and operational, and proper bus power is applied.
-1074388853	0xBFF6208B	CAN bus problems (tx 1, rx 0) caused all communications to stop. This error corresponds to CAN Bus Off state. Solutions: Verify that cabling is correct, devices are connected and operational, and that proper bus power is applied.
-1074388821	0xBFF620AB	CAN bus problems (tx 0, rx 1) caused all communications to stop. This error corresponds to CAN Bus Off state. Solutions: Verify that cabling is correct, devices are connected and operational, and proper bus power is applied.
-1074388789	0xBFF620CB	CAN bus problems (bad CRC) caused all communications to stop. This error corresponds to CAN Bus Off state. Solutions: Verify that cabling is correct, devices are connected and operational, and proper bus power is applied.
3. category: configuration and warning		
-1074388713	0xBFF62117	You called ReadMult for an object configured with Read Queue Length zero. Solutions: Configure Read Queue Length to a value greater than zero.
1073094665	0x3FF62009	The data returned from this Read matches the data returned from the previous call to Read. Solutions: If you merely want the most recent data, ignore this warning; If you are using the NI-CAN Frame API or NI-DNET, you can Wait for the Read Avail state prior to calling Read.
1073094667	0x3FF6200B	CAN bus problems detected, but communication is proceeding. This warning corresponds to CAN Error Passive state. Solutions: Verify that cabling is correct, devices are connected and operational, and that proper bus power is applied.
1073094668	0x3FF6200C	CAN transceiver warning, typically indicated by the NERR signal. A fault exists on the bus, but communication continues. Solutions: Verify that cabling is correct.
1073094699	0x3FF6202B	CAN bus problems detected (stuff error), but communication is proceeding. This warning corresponds to CAN Error Passive state. Solutions: Verify that cabling is correct, devices are connected and operational, and proper bus power is applied.

1073094701	0x3FF6202D	Exceeded resource limit for queues in shared memory between firmware/driver. Read or write queue performance is reduced. Solutions: Decrease queue lengths in objects; Decrease the total number of objects.
1073094731	0x3FF6204B	CAN bus problems detected (bad frame format), but communication is proceeding. This warning corresponds to CAN Error Passive state. Solutions: Verify that cabling is correct, devices are connected and operational, and that proper bus power is applied.
1073094763	0x3FF6206B	CAN bus problems detected (no ack), but communication is proceeding. This warning corresponds to CAN Error Passive state. Solutions: Verify that cabling is correct, devices are connected and operational, and proper bus power is applied.
1073094795	0x3FF6208B	CAN bus problems detected (tx 1, rx 0), but communication is proceeding. This warning corresponds to CAN Error Passive state. Solutions: Verify that cabling is correct, devices are connected and operational, and proper bus power is applied.
1073094827	0x3FF620AB	CAN bus problems detected (tx 0, rx 1), but communication is proceeding. This warning corresponds to CAN Error Passive state. Solutions: Verify that cabling is correct, devices are connected and operational, and proper bus power is applied.
1073094859	0x3FF620CB	CAN bus problems detected (bad CRC), but communication is proceeding. This warning corresponds to CAN Error Passive state. Solutions: Verify that cabling is correct, devices are connected and operational, and proper bus power is applied.