

2.4 Monitor Firmware Identification

Part numbers for SDI/DDI monitor firmware are shown in **Table 3** below. Firmware resides in either an EPROM or in the microprocessor ROM.

- The 3300/90 Diagnostic Instrument and the 3300/60 Vector Monitor are not supported by SDI/DDI.
- The original firmware in the 3300/17, 3300/36, 3300/39, 3300/40, 3300/52, 3300/53, 3300/54, 3300/75, 3300/80, 3300/81, 3300/85, and 3300/95 monitors is SDI/DDI compatible.

Table 3 Firmware Part Numbers for Individual Monitors ²		
Monitor Number	SDI/DDI Compatible EPROM Part Number	SDI/DDI Compatible Single-chip Microprocessor Part Number
3300/15	N/A	104044-01
3300/16	N/A	00800119 or 143972-01
3300/20	N/A	00800120 or 161667-01
3300/25	N/A	104044-02
3300/26	N/A	104044-03
3300/30 ¹	89809-01	142591-01
3300/35 ¹	89818-01	142592-01
3300/45 ¹	89836-01	142783-01
3300/46 ¹	89845-01	142784-01
3300/47 ¹	89854-01	142785-01
3300/48 ¹	89863-01	142786-01
3300/50-XX	89872-01	104046-XX
3300/55	N/A	104044-04
3300/61	89890-01	N/A
3300/65 ¹	89899-01	142637-01
3300/70	N/A	104044-05
ALL revisions of above mentioned EPROM and microprocessor numbers are SDI/DDI compatible. N/A = SDI/DDI compatible firmware not available in specified format. NOTE: 1. These monitors were changed from EPROM to single-chip microprocessor formats. There were NO changes to the firmware in these monitors – only hardware changes. Either the EPROM or microprocessor listed are SDI/DDI compatible. 2. See Appendix B for the list of firmware upgrade kit part numbers for the individual monitors.		

Use the following steps to check the firmware part number for the monitors in Table 3.

1. Disassemble the monitor by following the steps in the appropriate monitor manual. The microprocessor is located on the main circuit board that slides into the rack card guides. The EPROM is either on a small board, which plugs into the main board or is on the main board. The part number is marked on the EPROM or microprocessor.
2. Locate the EPROM or microprocessor on the circuit board by referring to the following sketches:

Firmware on the plug-in Memory Board

The following monitors have firmware installed in the EPROM located on a small plug in board (as shown in **Figure 9**):

3300/50-01

3300/50-02

3300/50-03

Only the part numbers in **Table 3** are SDI/DDI compatible. See Appendix B for a list of firmware upgrade kit Part Numbers.

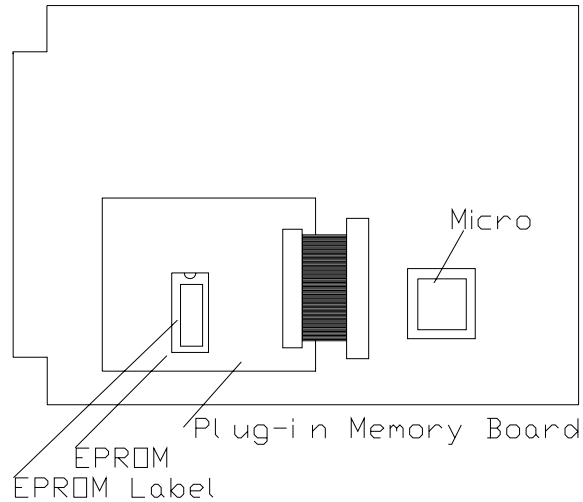


Figure 9

Expander Board Location

Firmware in the Microprocessor

These monitors have firmware installed in either the microprocessor ROM (a shown in **Figure 10**) or in the EPROM located on a small plug in board (as shown in **Figure 9**):

3300/15

3300/45

3300/16

3300/46

3300/20

3300/47

3300/25

3300/48

3300/26

3300/55

3300/30

3300/65

3300/35

3300/70

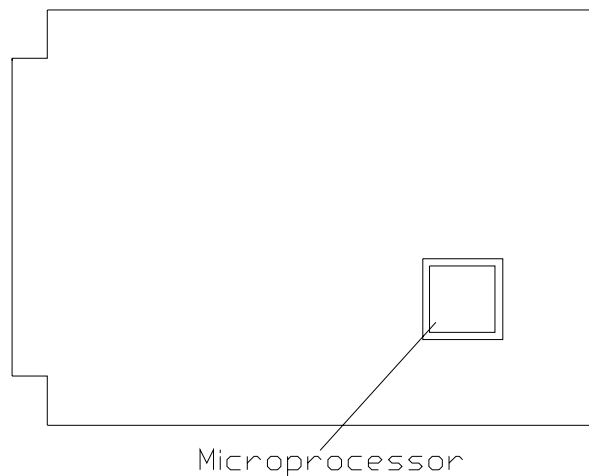


Figure 10

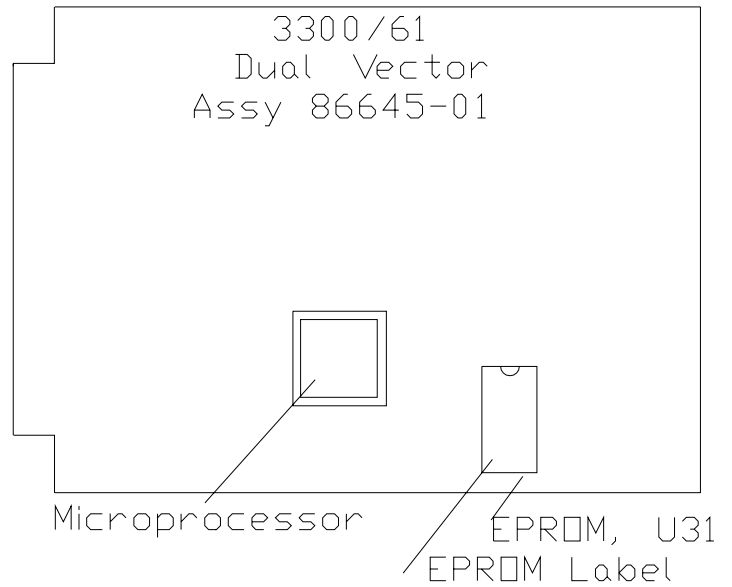
Microprocessor Location

Only the part numbers in **Table 3** are SDI/DDI compatible. See Appendix B for a list of firmware upgrade kit Part Numbers.

Firmware in the 3300/61 Dual Vector Monitor

The firmware for the 3300/61 Dual Vector Monitor is located in an EPROM on the main circuit board as shown in **Figure 11**.

Only the firmware in **Table 3** is SDI/DDI compatible. See Appendix B for the firmware upgrade kit Part Number.

**Figure 11**

EPROM Location on 3300/61

- If the individual monitor firmware is not SDI/DDI-compatible and you plan to use either internal SDI/DDI communications (through a 3300/02, 3300/03-02 or -03 System Monitor), or an external SDI/DDI-compatible comm processor (SDIX/DDIX, TDIX, or TDXnet™ CP) with your 3300 system, then you must contact your Bently Nevada representative to order firmware upgrade kits.

3. System Compatibility

Use this section to determine which components will or will not work in your system. Refer to Section 2 and/or **Table 2** to determine which system configuration you have.

See **Table 4** for compatibility between each System Monitor and the different Communications Processors and Software.

See **Appendix A** for the list of hardware upgrade kit part numbers.

See **Appendix B** for a list of firmware upgrade kit part numbers for the different monitors.

3.1 Mixed System Compatibility Issues

- If a Mixed System is being used with a DDM, TDM or PDM CP, the firmware in the individual monitors does **not** need to be SDI/DDI compatible.
- In order for the Mixed System to be compatible with the external communication processors (SDIX/DDIX, TDIX or TDXnet™ CP) and DM2000 software, the firmware in all of the monitors must be SDI/DDI compatible. See **Table 3** for SDI/DDI compatible firmware.

3.2 Additional Compatibility Issues

3.2.1 Monitors

- The original firmware in the 3300/17, 3300/36, 3300/39, 3300/40, 3300/52, 3300/53, 3300/54, 3300/75, 3300/80, 3300/81, 3300/85, and 3300/95 monitors is SDI/DDI compatible.
- The 3300/75, /80 and /81 monitors support SDI(X)/DDI(X), TDIX, and TDXnet™ CPs only.
- The 3300/75, /80 and /81 monitors are compatible with only the 3300/01-01, 3300/02 and 3300/03-XX System Monitors.
- The 3300/90 Diagnostic Instrument and the 3300/60 Vector Monitor are not supported by SDI/DDI.

3.2.2 Communications Processors

If a TDM communications processor is on the same communications chain with a TDIX or TDXnet™ communication processor, and the TDM firmware is Rev C or earlier, the TDM firmware will need to be upgraded. Contact your Bently Nevada representative to order a firmware upgrade kit for your TDM communications processor.

4. Appendix A

4.1 Hardware Upgrade Kit Part Numbers

Monitor	Hardware Upgrade Kit Part Number
Original or Mixed System to SDI/DDI or TDe System	104002
3300/03 Basic to SDI System Monitor	143121 (-01 option)
3300/03 SDI to SDI/DDI System Monitor	143121 (-02 option)
3300/03 Basic to SDI/DDI System Monitor	143121 (-03 option)

5. Appendix B

5.1 Firmware Upgrade Kit Part Numbers

To upgrade to an SDI/DDI compatible monitor

Monitor or Communication Processor Part Number	Firmware Upgrade Kit Part Number
3300/15 Dual Vibration Monitor	104535-01
3300/16 Dual Vibration w/Gap Monitor	104535-02
3300/20 Dual Thrust Position Monitor	104535-03
3300/25 Dual Accelerometer Monitor	104535-04
3300/26 Dual Accelerometer RMS Monitor	104535-05
3300/30 Six-channel Thermocouple Input Temperature Monitor	104535-06
3300/35 Six-channel RTD Input Temperature Monitor	104535-07
3300/45 Dual Differential Expansion Monitor	104535-08
3300/46 Ramp Differential Expansion Monitor	104535-09
3300/47 Complementary Input Differential Expansion Monitor	104535-10
3300/48 Case Expansion Monitor	104535-11
3300/50-01 Dual Setpoint Tachometer	104535-12
3300/50-02 Zero Speed Tachometer	104535-17
3300/50-03 Rotor Acceleration Tachometer	104535-18
3300/55 Dual Velocity Monitor	104535-13
3300/61 Dual Vector Monitor	104535-14
3300/65 Dual Probe Monitor	104535-15
3300/70 Dual Valve Position Indicator	104535-16

Note: The original firmware in the 3300/17, 3300/36, 3300/39, 3300/40, 3300/52, 3300/53, 3300/54, 3300/75, 3300/80, 3300/81, 3300/85, and 3300/95 monitors is SDI/DDI compatible.