**Exhibit V: Modular Approval Letter** 

**FCC ID: HN2EASYLAN** 

## NORTHWEST EMC, INC.

22975 NW Evergreen Parkway, Suite 400 Hillsboro, OR 97124

May 3, 2002

Dear Application Examiner:

Intermec Corporation's EASYLAN, FCC ID: HN2EASYLAN is seeking limited modular approval. The module will only be used in two models of printers: the 3400E400 and the 4400. The EUT meets the requirements for modular approval as detailed in FCC Public Notice DA00-1407. Compliance to each of the requirements is described below:

- 1. "The modular transmitter must have its own RF shielding." The radio portion of the module is contained in its own RF shielding. The shielding is installed at the factory. Please see Exhibit F for photos of the shielding.
- 2. "The modular transmitter must have buffered modulation/data inputs." The EUT has buffered data inputs to insure compliance with Part 15 requirements under conditions of excessive data rates or over-modulation. Please see Exhibit D for radio schematics of the module.
- **3.** "The modular transmitter must have its own power supply regulation." The EUT has its own power supply regulation to insure compliance with Part 15 requirements regardless of the quality or level of external DC supplying the module from the host unit. Please see Exhibit E for digital schematics.
- 4. "The modular transmitter must comply with the antenna requirements of Section 15.203 and 15.204(c)." The EUT meets the FCC antenna requirements. Please see Exhibit I for antenna information, Exhibit W for test setup photos, and Exhibits R, S, & T for the technical report.
- 5. "The modular transmitter must be tested in a stand-alone configuration." The EUT was tested in a stand-alone configuration. Please see Exhibit W for test setup photos, and Exhibits R, S, & T for the technical report. The EUT was first tested for radio spurious emissions in a standalone configuration with all available antennas at low, mid, and high transmit frequencies. However, this configuration did not meet all the requirements of FCC Public Notice DA 00-1407. Although it was tested outside of a 3400 printer, it had very short (<10cm) data and power cables connecting it to the printer. After conferring with Joe Dichoso at the FCC's OET lab, it was concluded that additional radiated scans should be made of the EUT in its typical installed configuration for each model of printer that it will be used in. It was agreed that this scan data would provide adequate justification for a "limited modular approval" for this radio in each of the printers it was tested in. The additional data is found in Exhibit T.

- 6. "The modular transmitter must be labeled with its own FCC ID number." The EUT is labeled with its own FCC ID number. Please see Exhibit H for a photograph of the label and its location on the device. Since the FCC ID number will not be visible when the module is installed inside a host printer, another label with the FCC ID will be applied to the exterior of the printer.
- 7. "The modular transmitter must comply with any specific rule or operating requirements applicable to the transmitter and the manufacturer must provide adequate instructions along with the module to explain any such requirements." The EUT is compliant with all applicable FCC rules. Detail instructions for maintaining compliance are given in the User Manual (see Exhibit O).
- 8. "The modular transmitter must comply with any applicable RF exposure requirements." The EUT is compliant with all applicable RF exposure requirements. RF Exposure is addressed in Section 4.5 of the technical report (see Exhibit B). RF Exposure information is provided with the antenna information (see Exhibit I).

Please contact me if you have additional questions. Your attention to this matter is greatly appreciated.

Best regards,

Greg Kiemel, Director of Engineering

Northwest EMC, Inc.