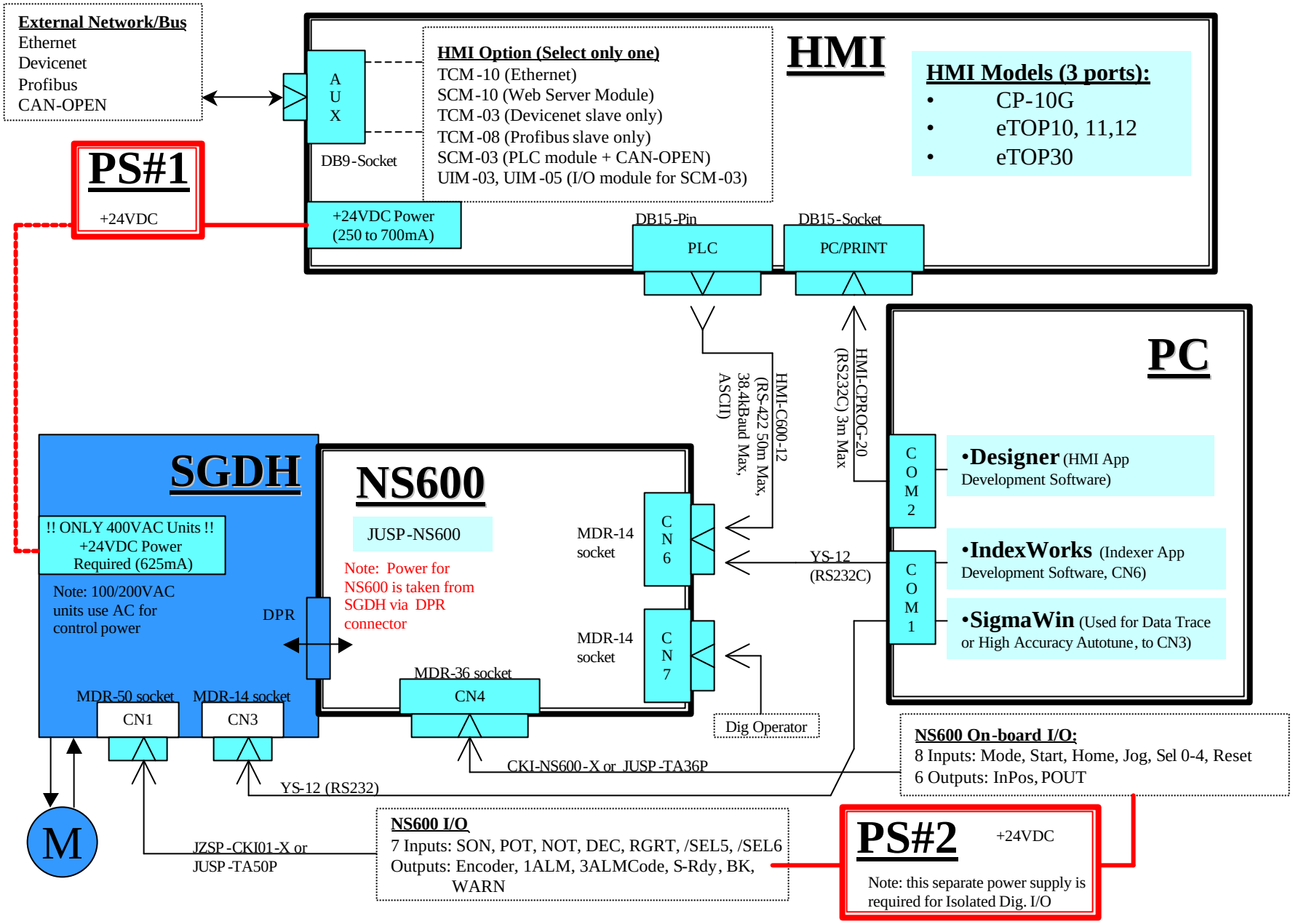
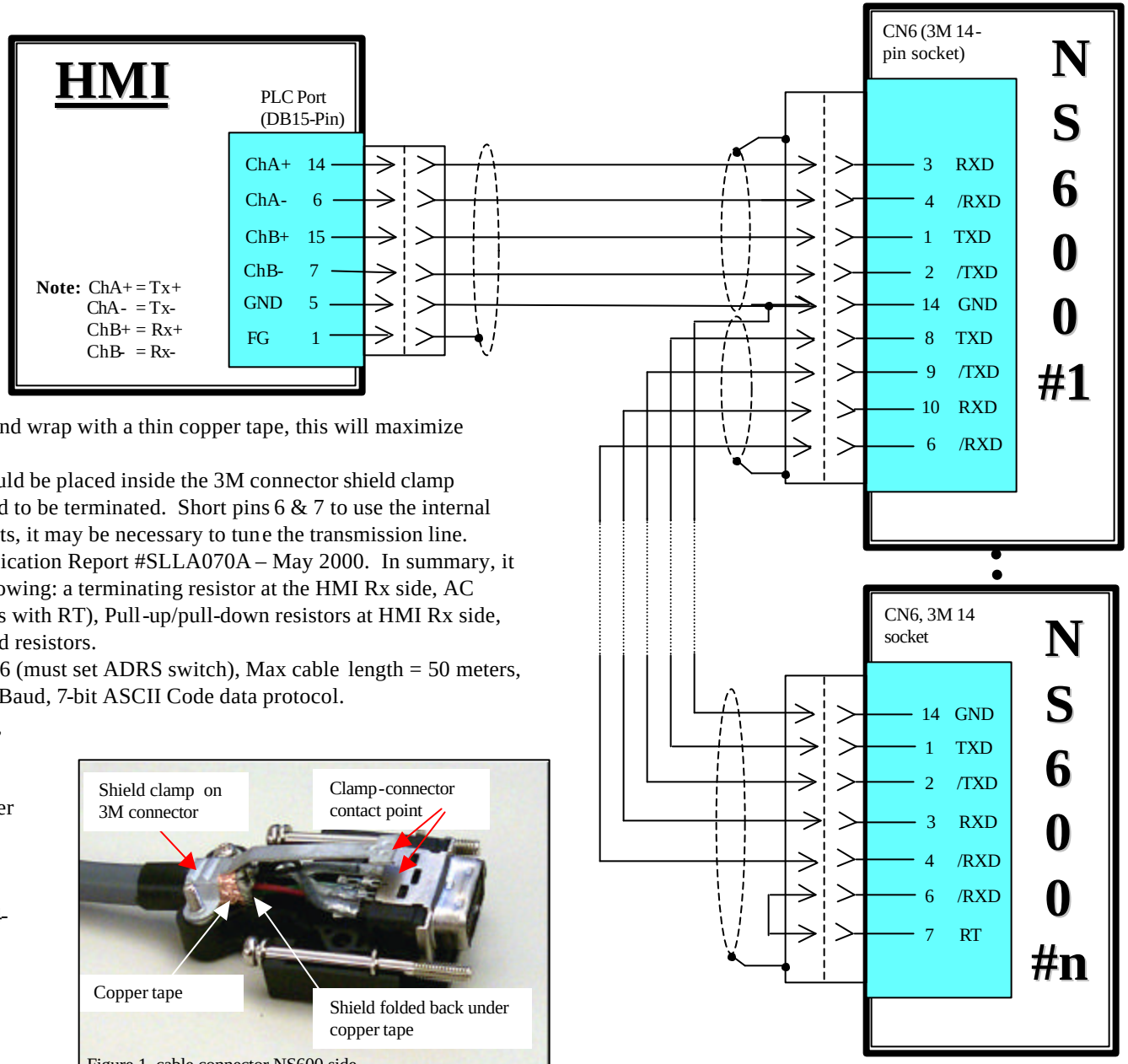
NS600 & HMI System Block Diagram #1



NS600 & HMI RS422 Multi-drop Wiring



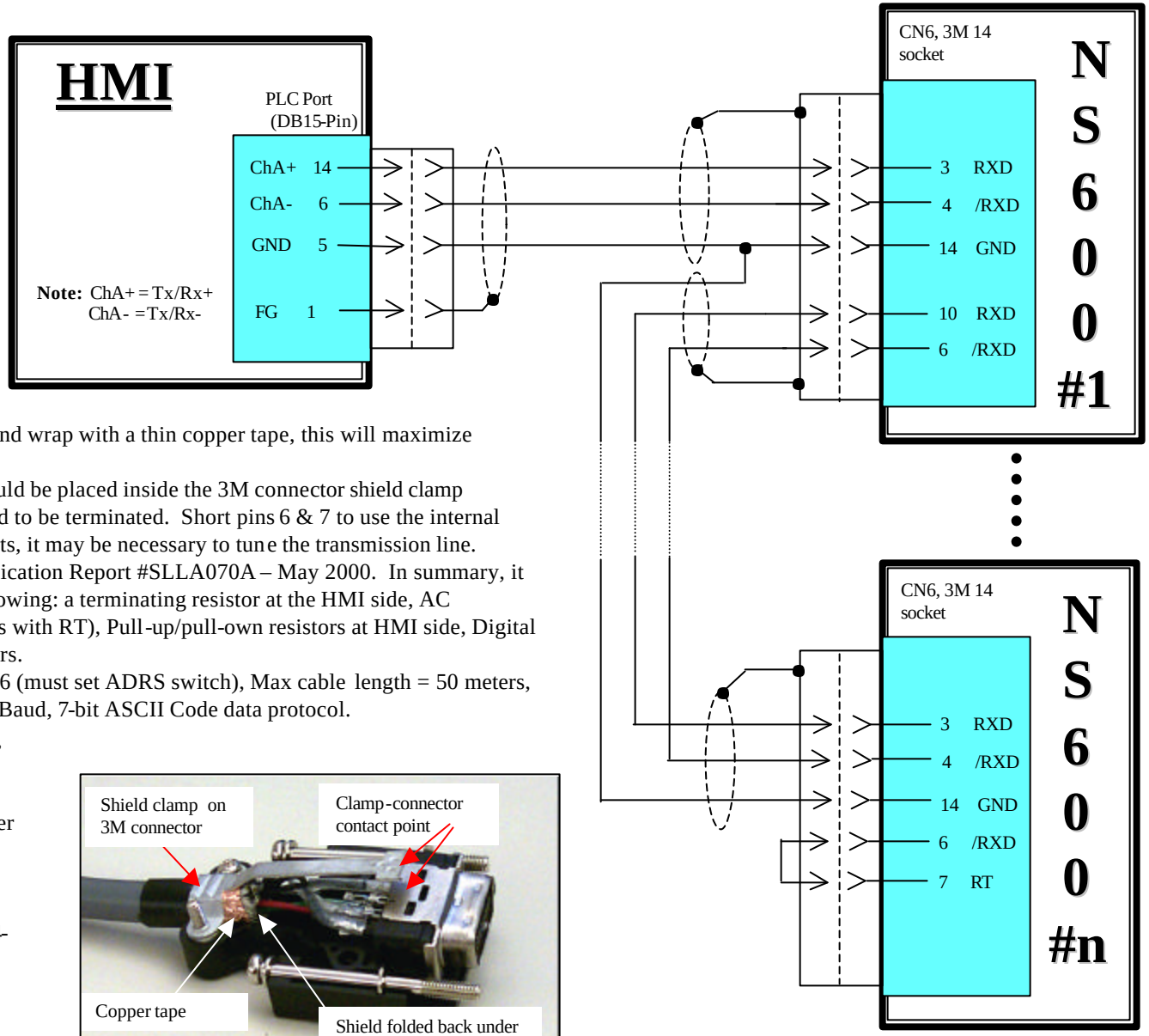
* See Installation Guide for additional installation instructions

Wiring & Installation Notes:

1) At cable ends, fold back shield and wrap with a thin copper tape, this will maximize contact area (see figure 1)
2) Cable shields at NS600 side should be placed inside the 3M connector shield clamp
3) The last NS600 (axis n) will need to be terminated. Short pins 6 & 7 to use the internal 100 ohm resistor. If noise persists, it may be necessary to tune the transmission line. Refer to Texas Instruments Application Report #SLLA070A – May 2000. In summary, it may be necessary to add the following: a terminating resistor at the HMI Rx side, AC termination (1000pF cap in series with RT), Pull-up/pull-down resistors at HMI Rx side, Digital Ground and Field ground resistors.
4) Maximum number of axis(n) = 16 (must set ADRS switch), Max cable length = 50 meters, Max transmission speed = 38.4kBaud, 7-bit ASCII Code data protocol.
5) In the case of long cable lengths, it may be necessary to terminate the shield at the local Field Ground location for that amplifier
6) NS600 mating connector is 14 pin, Yaskawa kit "YSC-1" includes 3M parts Connector: 10114-3000VE and Shell: 10314-52A0-008

Figure 1, cable connector NS600 side

NS600 & HMI RS485 Multi-drop Wiring



* See Installation Guide for additional installation instructions

Wiring & Installation Notes:

1) At cable ends, fold back shield and wrap with a thin copper tape, this will maximize contact area (see figure 1)
2) Cable shields at NS600 side should be placed inside the 3M connector shield clamp
3) The last NS600 (axis n) will need to be terminated. Short pins 6 & 7 to use the internal 100 ohm resistor. If noise persists, it may be necessary to tune the transmission line. Refer to Texas Instruments Application Report #SLLA070A – May 2000. In summary, it may be necessary to add the following: a terminating resistor at the HMI side, AC termination (1000pF cap in series with RT), Pull-up/pull-own resistors at HMI side, Digital Ground and Field ground resistors.
4) Maximum number of axis(n) = 16 (must set ADRS switch), Max cable length = 50 meters, Max transmission speed = 38.4kBaud, 7-bit ASCII Code data protocol.
5) In the case of long cable lengths, it may be necessary to terminate the shield at the local Field Ground location for that amplifier
6) NS600 mating connector is 14 pin, Yaskawa kit "YSC-1" includes 3M parts Connector: 10114-3000VE and Shell: 10314-52A0-008

Figure 1, cable connector NS600 side