

"One Module" 2 SPEED, 20 BIT TRACKING SYNCHRO/RESOLVER TO DIGITAL CONVERTER

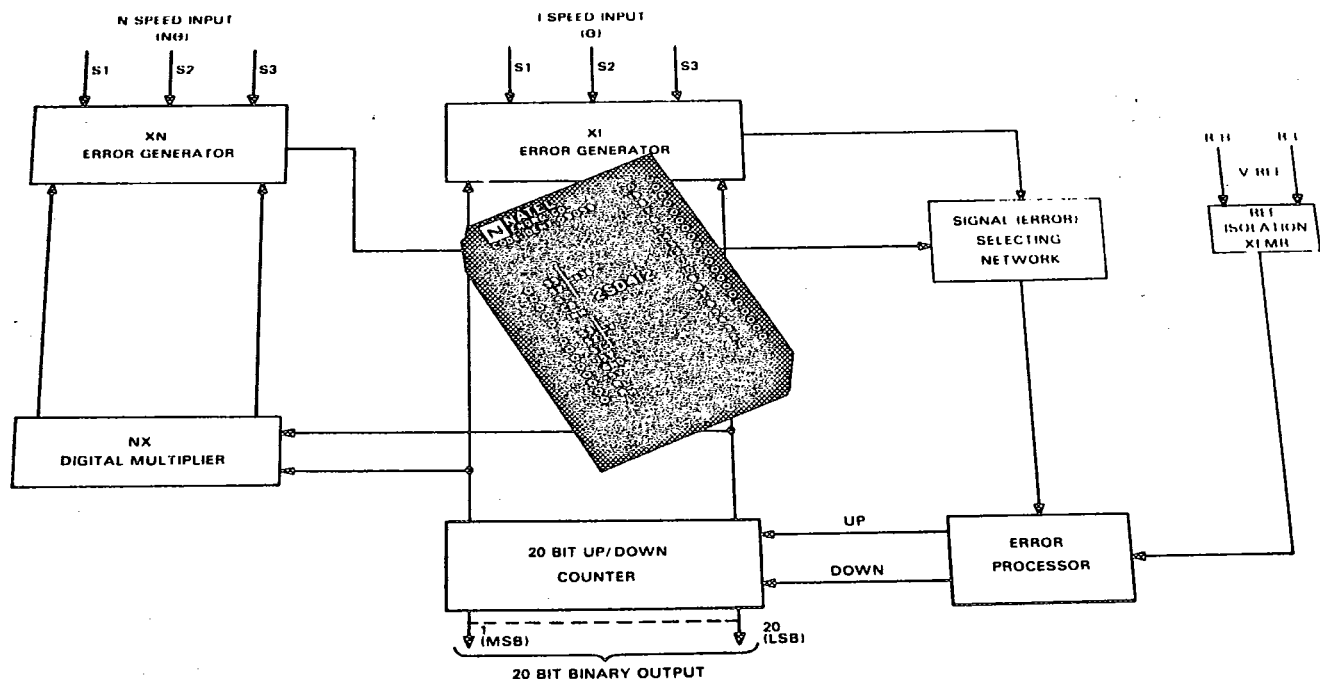
FEATURES

- Complete System in **ONE** Module
- No -15V Required
- Non-Binary Speed Ratios Accommodated
- 400-Hz Operation with Input/Reference Transformer Isolation
- 20-Bit Output, DTL/TTL Compatible
- Accuracy .001°
- Insensitive to Line Variations
- Hi-Rel (MIL 883) Available

DESCRIPTION

The Model 2SD412 is a complete two speed Synchro to Digital Converter packaged in **ONE** encapsulated module (2.6" x 3.6" x .82") with internal Input/Reference TRANSFORMER isolation provided.

The converter maintains high accuracy for input speed of up to 15 rpm referred to X1 input. The conversion technique uses a self-nulling "Type II Servo Controller". Almost any speed ratio can be accommodated in one module (e.g., 1 x 36 or 1 x 16, etc.).



SPECIFICATIONS**ELECTRICAL**

		<u>Code</u>
Input/Reference (I):	11.8/26	(1)
(Vrms @ 400 Hz	11.8/115	(2)
xfmr isolated)	26/26	(3)
	26/115	(5)
	90/115	(9)

Speed Ratio (n): 1:36, 1:16, 1:72, 1:32
(For other ratios, please specify)

Output: 20-Bit Parallel Binary
Angle (DTL/TTL Compatible)

Accuracy: up to 0.001°

Power Supply: +5 V-dc @ 600 mA
+15 V-dc @ 30 mA

ENVIRONMENTAL

Operating Temperature Range/Reliability (T):	<u>Code</u>
0 to 70 C/Commercial	(1)
-55 to 85 C/Military	(2)
-55 to 105 C/Military	(3)
0 to 70 C/MIL-STD-883C	(5)
-55 to 105 C/MIL-STD-883C	(7)
0 to 70 C/MIL-STD-883B	(8)
-55 to 105 C/MIL-STD-883B	(9)

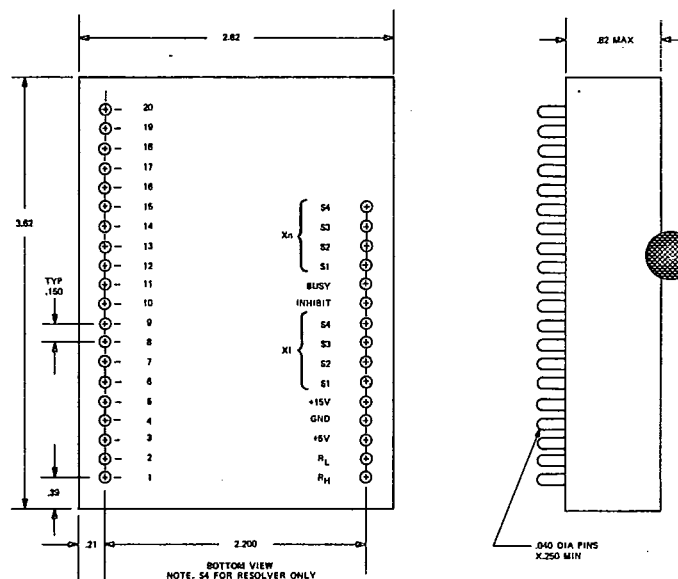
Storage: -55 to 125 C

MECHANICAL

Size: 2.625" x 3.125" x 0.82"

Mounting: PCB plug-in with pins
at .15" spacing

Busy: "0" Data Ready
"1" Busy

**ORDERING INFORMATION****Synchro Format:**

2SD412 — 1 x n — T 4 I

Input/Reference Code

Temperature/Reliability Code

Speed Ratio

Resolver Format:

Part Number is 2RD412 — 1 x n — T 4 I

All codes are the same as for Synchro Format