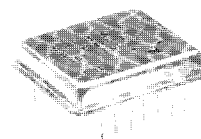
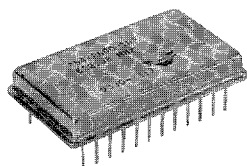
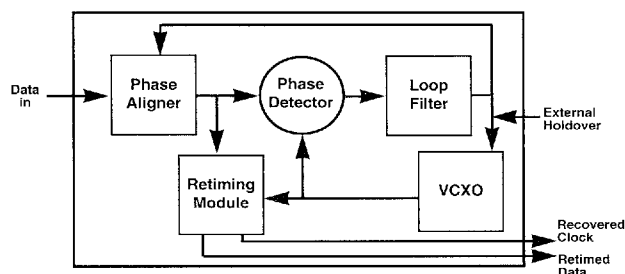


Sonet Clock Recovery Module SCRM-155



- Clock Recovery and Data Retiming (with VCXO)
Meets CCITT Type A or B-Interfaces with either type
- Holdover Feature offers ± 20 ppm clock accuracy with no data input
- Acquires Lock Quickly (40 bit periods)
- Eliminates Pattern (systematic) Jitter
- Virtually unlimited cascades

The Vectron SCRM-155 Sonet Clock Recovery Module recovers clock and data from an incoming NRZ PCM data stream. It regenerates the original incoming data stream through the use of an optimally timed decision circuit. The internal VCXO in the SCRM-155 allows the user, without the need of an additional crystal oscillator, to set the clock frequency with an external control voltage (holdover). Compatible with both CCITT Type A and Type B specifications.



430 series is electrically and mechanically compatible with AT&T TRU200. Contact factory for application note

		430 SERIES 24 pin Double Dip	601 SERIES 16 pin Double Dip
Clock Rate		155.52 MHz	
Acquisition Time	Input Density = 50%	40 bit periods (260 nanosec)	
Phase Drift due to input data	20 non-transitions 60 non-transitions	<0.002 UI <0.006 UI	
Jitter Tolerance	10 Hz (Exceeds requirements of TR-NWT-000253 and CCITT G.958) 300 Hz 6.5 kHz 65 kHz	>40 UI >10 UI >2 UI >2 UI	
Jitter Transfer	Peaking Bandwidth Residual Jitter	0 dBm 15.5 kHz typical <2° rms for input density of 50% <2°rms for 2 ⁷ -1 PRB Sequence <2°rms for 2 ²³ -1 PRB Sequence	
Free Running Temperature Stability		± 20 ppm over temperature	
Tuning Range	0 to -5V (ECL) 0 to +5V (PECL)	$\geq \pm 50$ ppm $\geq \pm 50$ ppm	
Signal levels		10 KH ECL/PECL compatible, differential input, complementary output	
Supply		-5.2 Vdc $\pm 5\%$ at 85 mA (ECL) +5.0 Vdc $\pm 5\%$ at 85 mA (PECL)	
Size (see page 90)		24 pin Double DIP 0.8" x 1.4" x 0.2" (20.3 x 36 x 5.1 mm)	16 pin Double DIP 0.8" x 1.0" x 0.2" (20.3 x 25.4 x 5.1 mm)
How To Order		see page 90	

How to Order

SCRM-155 16 PIN DOUBLE DIP

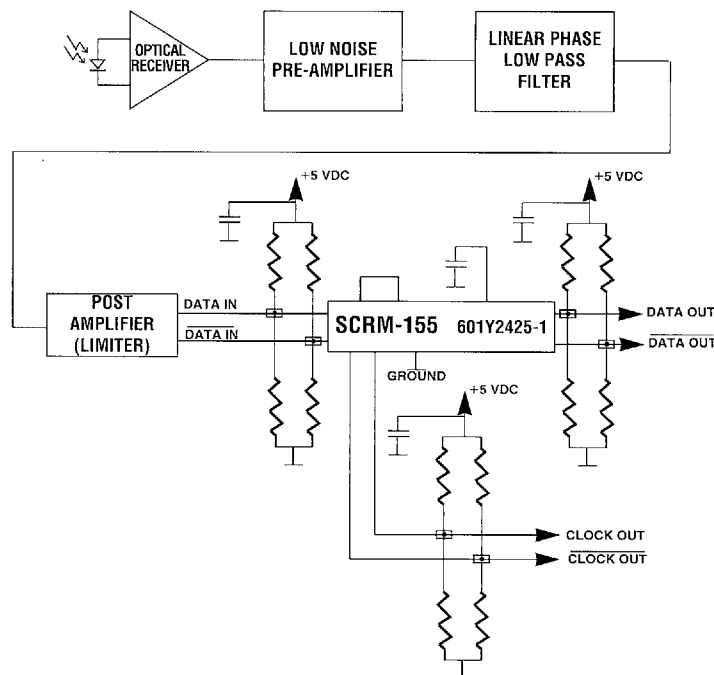
Ordering Method		Temperature Range	Output	Supply Voltage
601Y2425	@ 155.52 MHz	0 to +70°C	ECL	-5.2 Vdc
601Y2425-1	@ 155.52 MHz	0 to +70°C	PECL	+5 Vdc
601Y2425-2	@ 155.52 MHz	-40 to +85°C	ECL	-5.2 Vdc
601Y2425-3	@ 155.52 MHz	-40 to +85°C	PECL	+5 Vdc

SCRM-155 24 PIN DOUBLE DIP*

Ordering Method		Temperature Range	Output	Supply Voltage
430Y2250	@ 155.52 MHz	0 to +70°C	ECL	-5.2 Vdc
430Y2250-1	@ 155.52 MHz	0 to +70°C	PECL	+5 Vdc
430Y2250-2	@ 155.52 MHz	-40 to +85°C	ECL	-5.2 Vdc
430Y2250-3	@ 155.52 MHz	-40 to +85°C	PECL	+5 Vdc

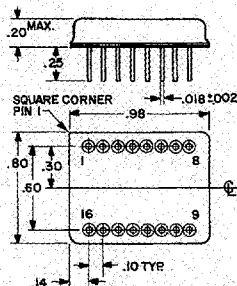
*Package and pin functions are compatible with AT&T TRU200.
Contact factory for application note.

VECTRON SCRM-155 16 PIN PACKAGE PECL VERSION APPLICATION SCHEMATIC



OUTLINE/INSTALLATION DRAWINGS

SCRM-155 16 PIN DOUBLE DIP 601Y2425 Series

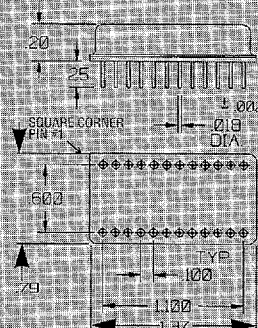


PIN	ECL FUNCTION	PECL FUNCTION
1	-5.2 VDC	0V, CASE
2	N/C	N/C
3	CASE, 0V	CASE, 0V
*4	VCXO IN (HOLDOVER)	VCXO IN (HOLDOVER)
5	DATA IN	DATA IN
6	DATA IN	DATA IN
7	DATA OUT	DATA OUT
8	DATA OUT	DATA OUT
9	CLOCK OUT	CLOCK OUT
10	CLOCK OUT	CLOCK OUT
*11	PLL OUT	PLL OUT
12	N/C	N/C
13	N/C	N/C
14	CASE, 0V	CASE, 0V
15	N/C	N/C
16	0V, CASE	+5 VDC

*FOR NORMAL OPERATION, TIE PIN 4 TO PIN 11

NOTE: PIN NUMBERS ARE FOR REFERENCE ONLY. THEY DO NOT APPEAR ON THE UNIT.

SCRM-155 24 PIN DOUBLE DIP* 430Y2250 Series



PIN	ECL FUNCTION	PECL FUNCTION
1	CASE, 0V	CASE, 0V
2	N/C	N/C
3	*VCXO IN (HOLDOVER)	VCXO IN (HOLDOVER)**
4	CLOCK OUT	CLOCK OUT
5	CLOCK OUT	CLOCK OUT
6	0V, CASE	+5 VDC
7	DATA OUT	DATA OUT
8	DATA OUT	DATA OUT
9	N/C	PLL OUT**
10	DATA OUT	DATA OUT
11	0V, CASE	+5 VDC
12	PLL OUT	N/C
13, 14	CASE, 0V	CASE, 0V
15	DATA IN	DATA IN
16	N/C	N/C
17	DATA IN	DATA IN
18	N/C	N/C
19	CASE, 0V	CASE, 0V
20, 21	0V, CASE	+5 VDC
22, 23	CASE, 0V	CASE, 0V
24	CASE, 0V	CASE, 0V

*FOR NORMAL OPERATION, TIE PIN 12 TO PIN 3

**FOR NORMAL OPERATION, TIE PIN 9 TO PIN 3

*Package and pin functions are compatible with AT&T TRU200. Contact factory for application note.