Extended Query of the System Configuration (ESYS)

Command Description:

Extended report of the system's configuration.

Valid Command Data:

The system configuration information is encoded into a 32 digit string. The following list explains each of the digit assignments.

DIGIT	DESCRIPTION	VALUES	
28-31	Digit 28 to digit 31 are reserved for future use	default value = 0	
27	Reserved	default value = 0	
26	Channel Configuration	0=Not Installed	1=Installed
25	CH 1 RF Channel Bypass	0=Not Installed	1=Installed
24	CH 2 RF Channel Bypass	0=Not Installed	1=Installed
23	Insertion Loss Estimate	0=Not Installed	1=Installed
22	Selectable 10 MHz Reference	0=Not Installed	1=Installed
21	CH1 RF Carrier Frequency Range	1=800 to 2500 MHz 3=25 to 3000 MHz 5=800 to 2700 MHz 7=25 to 4000 MHz	2=25 to 2500 MHz 4=800 to 3000 MHz 6=25 to 3600 MHz 8=800 to 4000 MHz
20	CH2 RF Carrier Frequency Range	1=800 to 2500 MHz 3=25 to 3000 MHz 5=800 to 2700 MHz 7=25 to 4000 MHz	2=25 to 2500 MHz 4=800 to 3000 MHz 6=25 to 3600 MHz 8=800 to 4000 MHz
19	Dynamic Emulation Capability	0=Not Installed	1=Installed
18	Doppler Frequency Range	1=-740 to -1, 1 to 740 Hz 2=-1000 to -1, 1 to 1000 Hz	
17	Input reference Level Range	1=8 to -32 dBm 3=5 to -30 dBm	2=5 to -35 dBm
16	Relative Path Loss Range	1=0 to 50 dB 3=0 to 30 dB	2=0 to 40 dB
15	Relative Delay Resolution	1=10 nsec 3=0.5 nsec	2=1 nsec
14	Relative Delay Range	1=200 μsec 3=800 μsec 5=66.666 μsec 7=125.0000 μsec	2=100 μsec 4=1600 μsec 6=533.328 μsec 8=2000μsec
13	IF Channel Bandwidth	1=6 MHz 3=26 MHz 5=FLEX5	2=15 MHz 4= 8 MHz
12	DSP Module Type	1=Type 1 DSP FW Version = 1.10 2=Type 2 DSP FW Version = 2.00 3=Type 3 DSP FW Version = 3.00 or 3.20 4=Type 4 DSP FW Version = 4.00 5=Type 5 DSP FW Version = 4.10,4.11,4.20 6=Type 6 DSP FW Version = 4.40 7=Type 7 DSP FW Version = 5.00 8=Type 8 DSP FW Version = 5.10 9=Type 9 DSP FW Version = 5.20 – 5.24 A=Type A DSP FW Version =5.30	

DIGIT	DESCRIPTION	VALUES
11	CH1 Tunable RF Filter Type	0=not present 1=Type 1 (800 to 2500 MHz) 2=Type 2 (800 to 3000 MHz/30 MHz) 3=Type 3 (800 to 3000 MHz/35 MHz) 4=Type 4 (800 to 4000 MHz/35 MHz) 5=Type 5 (800 to 4000 MHz/35 MHz) +2 dB 6=Type 6 (800 to 3000 MHz/35 MHz) +2 dB
10	CH2 Tunable RF Filter Type	0=not present 1=Type 1 (800 to 2500 MHz) 2=Type 2 (800 to 3000 MHz/30 MHz) 3=Type 3 (800 to 3000 MHz/35 MHz) 4=Type 4 (800 to 4000 MHz/35 MHz) 5=Type 5 (800 to 4000 MHz/35 MHz) +2 dB 6=Type 6 (800 to 3000 MHz/35 MHz) +2 dB
9	Number of RF channels	1 or 2
8	Total number of paths	1=3 paths 2=6 paths 3=9 paths 4=12 paths
7	IF Module Type	1=Type 1 (reserved) 2=Type 2 (6 MHz, 10nsec/200μsec) 3=Type 3 (15 MHz, 1nsec/100μsec) 4=Type 4 (15 MHz, 1nsec/800μsec) 5=Type 5 (Universal)
6	Reserved	1
5	CH1 Up/Down Converter Type	0=not present 1=Type 1 (reserved) 2=Type 2 (6 MHz enhanced conversion) 3=Type 3 (6 MHz basic conversion) 4=Type 4 (15 MHz enhanced conversion) 5=Type 5 (15 MHz basic conversion) 6=Type 6 (Universal)
4	CH2 Up/Down Converter Type	0=not present 1=Type 1 (reserved) 2=Type 2 (6 MHz enhanced conversion) 3=Type 3 (6 MHz basic conversion) 4=Type 4 (15 MHz enhanced conversion) 5=Type 5 (15 MHz basic conversion) 6=Type 6 (Universal)
3	CH1 Output Attenuator Type	0=not present 1=Type 1 (0.1 dB step/800 to 2500 MHz) 2=Type 2 (0.5 dB step/25 to 2500 MHz) 3=Type 3 (0.5 dB step/25 to 3000 MHz) 4=Type 4 (0.1 dB step/800 to 2700 MHz) 5=Type 5 (0.1 dB step/25 to 4000 MHz)
2	CH2 Output Attenuator Type	0=not present 1=Type 1 (0.1 dB step/800 to 2500 MHz) 2=Type 2 (0.5 dB step/25 to 2500 MHz) 3=Type 3 (0.5 dB step/25 to 3000 MHz) 4=Type 4 (0.1 dB step/800 to 2700 MHz) 5=Type 5 (0.1 dB step/25 to 4000 MHz)
1	CH1 Local Oscillator Type	0=not present 1=Type 1 (reserved) 2=Type 2 (800-1100 MHz) 3=Type 3 (1800-2500 MHz) 4=Type 4 (200-400 MHz)

DIGIT	DESCRIPTION	VALUES
		5=Type 5 (940-2860 MHz) 6,7=reserved
0	CH2 Local Oscillator Type	0=not present 1=Type 1 (reserved) 2=Type 2 (800-1100 MHz) 3=Type 3 (1800-2500 MHz) 4=Type 4 (200-400 MHz) 5=Type 5 (940-2860 MHz) 6,7=reserved

Example:

/CNFG: ESYS/

Expected Response:

/CNFG: ESYS= 000001111177123137584442451665555/

NOTE: Bit 0 is to the right.

This response would indicate the unit was equipped with the following features:

- Channel Configuration Installed
- RF Channel 1 Bypass Installed
- RF Channel 2 Bypass Installed
- Output Power Estimation Installed
- Selectable 10 MHz Reference Installed
- Channel 1 RF Carrier Range : 25 to 4000 MHz
- Channel 2 RF Carrier Range : 25 to 4000 MHz
- Dynamic Environment Emulation Capability Installed
- Doppler Frequency Range of -1000 to 1000 Hz
- Input Reference Level Range of 5 to -30 dBm
- Relative Path Loss Range of 0 to 50 dB
- Relative Path Delay 125 µsec range / 0.5nsec resolution
- Type 8 DSP Module
- Channel 1 Type 2 (800 to 4000 MHz) Tunable RF Filter present
- Channel 2 Type 2 (800 to 4000 MHz) Tunable RF Filter present
- Two RF channels
- Six total paths
- Universal (Type 5) IF module
- Reserved
- Universal (Type 6) Channel 1 Up/Down Converter Type