COM-8001 + Matlab Arbitrary Waveform Generator Troubleshooting

1. From Matlab, run the matlab program com8001r1.m

Check that the size of the resulting file generated (com8001r1.bin) is 313KB.

- 2. Check the memory underneath the COM-8001 module. It should be well seated (if not, reseat it). It should be a 256MB memory module.
- 3. Check the COM-5003 firmware option (click on the swiss army knife button). The selected personality index should be 2 (when using USB data transfers) or 3 (when using TCP-IP/LAN data transfers).
- 4. Load the com8001r1.bin file into memory. The uploaded size should be 320000 bytes.

OM5003 TCP-IP / USB GATEWAY COM8001 Arbitrary Waveform Generator COM2001 Digital-to-Analog Com Upload File Upload File Upload File Upload Address Upload Address Upload Window Length Option Upload Vindow Length (Evtes) Start Download W Output: Flow Start Download Sp Start Download S	OM5003 TCP-IP / USB GATEWAY COM8001 Arbitrary Waveform Generator COM2001 Digital-to-Analog Com Upload File Upload File Upload Address Upload Window Length Option Upload Window Length (Bytes) Start Downlo Upload Window Length (Bytes) Start Downlo Upload Vindow Length (Bytes) Start Downlo Upload Tile Upload Completed Download Wi Output Flow 320000 bytes were found in the selected upload file. All of these 320000 bytes	ComBlock Control Center ile Operations Functions Help		
COM8001 Arbitrary Waveform Generator COM2001 Digital-to-Analog Com Upload File Upload File Upload File Upload Window Length Option Upload Window Length Option Upload Window Length (Bytes) Start Download W Output: Flow Download Sp 20000 bytes were found in the selected upload file All of these 320000 bytes were successfully uploaded.	COM8001 Arbitrary Waveform Generator Pattern Generator Functions Pattern Generator Functions Pattern Generator Functions Upload File Upload File Upload Address Upload Window Length Option Upload Window Length (Bytes) Start Download W Output Flow Download Sp Output Flow Download Sp Output Pinou Output Windt Output Windt	* 🔌 📽 🎸 🚺 🖄 🖽 🕮		
COM2001 Digital-to-Analog Con Upload File Upload File Upload File Upload File Upload Window Length Option Upload Window Length (Bytes) Start Download W Output Flow Download Sp Start Download Sp Start Desce Star	Pattern Generator Functions COM2001 Digital-to-Analog Com Upload File Upload File Upload File Upload Hile Format Start Upload Address Upload Window Length Option Upload Window Length (Bytes) Start Downlo Upload Window Length (Bytes) Start Downlo Upload Window Length (Bytes) Start Downlo Upload Bile Work Flow Output Flow Ownload Sp Output Pinou Output Widt Ok	OM5003 TCP-IP / USB GATEWAY		
COM2001 Digital-to-Analog Com	COM2001 Digital-to-Analog Com			
	Output Widt Ok	the second se	Upload File Upload File Format Start Upload Address Upload Window Length Option Upload Window Length (Bytes) Start Download W Download W Download Sp Upload Sp Start Download Sp	uments\com8001r1.bin Binary File V 0 Dec V Entire Upload File V Hex V eted 0 bytes were found in the selected 1 file. All of these 320000 bytes

5. Playback one (Start single download action). Close the Pattern generation function window. Open the COM-8001 status (blue I button). The read checksum in status registers 31/32 should match the write checksum in status registers 33/34. If not the

Status Re	0.003	er values in	HEX
Register	22:00	Register	29: 00
Register	23: E2	Register	30: 01
Register	24:04	Register	31:00
Register	25:00	Register	32: B7
Register	26:00	Register	33: 00
Register	27; E2	Register	34: B7
Register	28:04		

6. Playback the waveform (Start continuous download action) at 200 KSamples/s output sampling rate.

Upload File	uments\com8001r1.bin		
Upload File Format	Binary file		×
Start Upload Address	0	Dec	~
Upload Window Length Option	Entire Upload File	_	~
Upload Window Length (Bytes)	4E200	Hex	Y
Start Download Address	0	Dec	×
2002 7 1010 V	C	12	-
Download Window Length (Bytes)	320000	Dec	~
Output Flow	Data Pushed		×
Download Speed (Hz)	200000		
Output Pinout Option	Most Common ComBlock		×
Output Width Option	20		~
Clock	Internal		~
Action	Start Continuous Down	oad	*

7. Using an oscilloscope, verify that the waveform output is a clean 1 KHz sinewave at the COM-2001 SMA outputs.