

Both HPLOUT and HPROUT are powered – output on both channels

The screenshot displays a software interface for an AIC310X EVM GUI, divided into several functional panels:

- Analog Generator:** Configured with a sine wave at 1.00000 kHz. Channel A level is 631.6 mV and Channel B level is 629.3 mV. Both channels are set to 1.00005 kHz.
- Analog Analyzer:** Shows a spectrum plot with a peak at 1.00003 kHz. Channel A THD+N Ratio is 0.00928%.
- Digital Generator:** Configured with a sine wave at 1.00000 kHz and -3.000 dBFS.
- Digital Analyzer:** Shows a spectrum plot with a peak at 14.739 dBFS.
- Digital I/O:** Configured for PSIA connectors and 44.1000 kHz sample rate.
- AIC310X EVM GUI:** The main control interface with a red header. It includes:
 - Interface:** I2C mode selected.
 - Firmware:** Located on USB-MODEVM, version V0105.
 - Resets:** Software and Hardware Reset buttons.
 - ADC/DAC Overflows:** Indicators for Left and Right channels.
 - Short Circuit Detect:** Indicators for HPLOUT, HPROUT, HPLCOM, and HPRCOM.
 - AGC:** AGC Noise Threshold Exceeded and AGC Gain Applied indicators.
 - Navigation:** Tabs for Audio Input/ADC, Bypass Paths, Audio Interface, Clocks, GPIO, AGC, Filters, DAC/Line Outputs, Output Stage Config, and High Power Outputs.
 - Command Buffer:** A text area containing I2C commands: `w 30 41 0D` and `w 30 33 0D`. A red circle highlights these commands. Below it are buttons for "Execute Command Buffer" and "Clear Command Buffer".
 - Read Data:** A hex display showing data from the I2C address 0x30.

At the bottom, a status bar shows "TLV320AIC3106 - Connected" and a "Disconnect" button.

HPLOUT powered and HPROUT muted – no output on HPROUT only

The screenshot displays the Texas Instruments AIC310x EVM GUI with several windows open:

- Analog Generator:** Wfm: Sine, Normal, Frequency: 1.00000 kHz, High Acc. selected.
- Analog Analyzer:** Channel A and B settings. Channel A Level: 531.6 mV, Channel B Level: 9.000 V. Frequency: 1.00004 kHz, Filter: 0.00005 kHz. THD+N Ratio: 0.00928 %.
- Digital Generator:** Wfm: Sine, Normal, Frequency: 1.00000 kHz.
- Digital Analyzer:** Analyzer: FFT spectrum analyzer (fft), Ch 1 Input: HiRes A/D @65536, Ch 2 Input: Anlr-B. Peak Mon: 32.205 dBFS.
- Digital I/O:** Output Connector: PSIA, Input Connector: PSIA. Sample Rate (SR): 44.1000 kHz, Sample Rate-ISR: 44.0995 kHz. Audio Format: Linear, 16 bits.
- Sweep:** Data 1: Fft.Ch.1 Ampl, Top: +6.000 dBV, Bottom: -150.000 dBV, Divs: 5, Auto selected.
- Audio Precision:** 10/19/21 15:06:56. Graph showing dBV vs Hz (20 to 2k).
- AIC310x EVM GUI:** Main interface with status indicators for HPLOUT, HPROUT, HPLCOM, and HPRCOM. All are green, indicating they are powered on.
- Command Buffer:** I2C Address: 0x30. Command Buffer contains: w 30 41 05. Status: bus error, req error, req done.

At the bottom, a status bar shows: TLV320AIC3106 - Connected [Disconnect]

Both HPLOUT and HPROUT are muted – no output on both channels

The screenshot displays the Texas Instruments AIC310x EVM GUI. The top section shows the configuration for the Analog and Digital Generators. The Analog Generator Channel A and Channel B are both set to 1.00003 kHz and 1.000 V. The Digital Generator is also set to 1.00003 kHz. The Digital Analyzer shows the FFT spectrum for both channels, with peak levels of -94.360 dBFS and -94.617 dBFS. The Digital I/O section shows the output connector as PSIA and the sample rate as 44.0996 kHz. The bottom section shows the I2C interface configuration, with the I2C address set to 0x30. The Command Buffer shows the following data:

Command Buffer	I2C Address	Read Data (Hex)
w	30 41 05	5
w	30 33 05	0
		0
		0
		0
		0
		0
		0
		0
		0

The status indicators for HPLOUT, HPROUT, HPLCOM, and HPRCOM are all green, indicating they are muted. The I2C interface is set to I2C Fast Mode. The bottom status bar shows the device is connected: TLV320AIC3106 - Connected.

MIC3R is disconnected from ADC with HPROUT powered – no output on HPROUT only

The image displays a software interface for audio analysis and device control. On the left, the 'Analog Analyzer' window shows two channels: Channel A and Channel B. Channel B is highlighted with a red box, showing a level of 24.63 mV and a frequency of 10.363 kHz. Below this, a 'Sweep' window shows a frequency response plot with a peak at approximately 10 kHz. On the right, the 'AIC310x EVM GUI' is shown. It features a red header with the Texas Instruments logo and the text 'AIC310x EVM GUI'. The interface includes sections for 'Interface' (I2C), 'Firmware' (located on USB-MODEVM, version V0105), 'Resets' (Software and Hardware Reset buttons), and status indicators for 'ADC Overflow', 'DAC Overflow', 'Short Circuit Detect', and 'AGC Gain Applied'. A 'Command Buffer' section shows I2C communication logs with the following entries:

```

bus error ● w 30 11 0F
req error ● w 30 12 FF
req done ● w 30 41 0D
           w 30 33 0D
    
```

The 'w 30 12 FF' command is highlighted with a red box. Below the logs, there are buttons for 'Execute Command Buffer' and 'Clear Command Buffer'. At the bottom of the GUI, there is a status bar showing 'TLV320AIC3106 - Connected' and a 'Disconnect' button.

MIC3L is disconnected from ADC with HPLOUT powered – no output on HPLOUT only

The screenshot displays the Texas Instruments AIC310x EVM GUI with several measurement windows open:

- Analog Generator:** Wfm: Sine, Normal, Frequency: 1.00000 kHz, High Acc. selected.
- Analog Analyzer:** Channel A and B. Channel A shows 24.63 mV, 160.814 Hz. Channel B shows 10.9 mV, 1.00003 kHz. THD+N Ratio: 0.12658%.
- Digital Generator:** Wfm: Sine, Normal, Frequency: 1.00000 kHz.
- Digital Analyzer:** Analyzer: FFT spectrum analyzer (fft). Ch 1: 85.349 dBFS, Ch 2: 15.024 dBFS.
- Digital I/O:** Output Connector: PSIA, Input Connector: PSIA. Sample Rate (SR): 44.1000 kHz, Sample Rate (ISR): 44.0996 kHz.
- Sweep:** Data 1: Fft.Ch.1 Ampl, Top: +6.000 dBV, Bottom: -150.000 dBV, Divs: 5, Auto selected.
- Audio Precision:** Graph showing dBV vs Hz (20 to 2k). Trace 1: Fft.Ch.2 Ampl, Green, Solid line style.

The **AIC310x EVM GUI** main window shows the following status:

- Interface:** I2C
- Firmware:** Located on: USB-MODEVM, Version: V0105
- Resets:** Software Reset, Hardware Reset (both with Reset buttons)
- ADC Overflow:** Left, Right (both green)
- DAC Overflow:** Left, Right (both green)
- Short Circuit Detect:** HPLOUT, HPROUT, HPLCOM, HPRCOM (all green)
- AGC Noise Threshold Exceeded:** L AGC, R AGC (both green)
- AGC Gain Applied:** L, R (both green)

The **Command Buffer** window shows:

- I2C Address: 0x 30
- bus error: w 30 11 FF
- req error: w 30 12 F0
- req done: w 30 41 0D
- req done: w 30 33 0D

Buttons: Execute Command Buffer, Clear Command Buffer

Interface options: I2C Standard Mode, I2C Fast Mode, GPIO

Bottom status bar: TLV320AIC3106 - Connected, Disconnect

Both MIC3L and MIC3R disconnected from ADC with HPLOUT and HPROUT powered – no output on both channels

The screenshot displays the Texas Instruments AIC310x EVM GUI with several configuration windows open:

- Analog Generator:** Wfm: Sine, Normal, Frequency: 1.00000 kHz, High Acc. selected.
- Analog Analyzer:** Channel A and B, DC, BNC Unbr. Level: 24.72 mV, 24.63 mV. Frequency: 46.2605 Hz, 6.98251 kHz. THD+N Ratio: 0.13432 %.
- Digital Generator:** Wfm: Sine, Normal, Frequency: 1.00000 kHz.
- Digital Analyzer:** Analyzer: FFT spectrum analyzer (fft), Ch 1 Input: HiRes A/D @65536, Ch 2 Input: HiRes A/D @65536. FFT: 32768, Acquire: Track FFT.
- Digital I/O:** Output Connector: PSIA, Input Connector: PSIA, Sample Rate (SR): 44.1000 kHz, Sample Rate (ISR): 44.0996 kHz.
- Sweep:** Data 1: Fft.Ch.1 Ampl, Top: +6.000 dBV, Bottom: -150.000 dBV, Divs: 5, Auto selected.
- Audio Precision:** 10/19/21 15:06:56, showing a frequency spectrum plot from 20 Hz to 2k Hz.

The main GUI interface includes:

- Interface:** I2C selected.
- Firmware:** Located on: USB-MODEVM, Version: V0105.
- Resets:** Software Reset, Hardware Reset buttons.
- ADC Overflow:** Left, Right indicators.
- DAC Overflow:** Left, Right indicators.
- Short Circuit Detect:** HPLOUT, HPROUT, HPLCOM, HPRCOM indicators.
- AGC Noise Threshold Exceeded:** L AGC, R AGC indicators.
- AGC Gain Applied:** L, R indicators.

The **Command Buffer** interface shows:

- I2C Address: 0x30
- Command Buffer list:
 - bus error: w 30 11 FF
 - req error: w 30 12 FF
 - req done: w 30 41 0D, w 30 33 0D
- Buttons: Execute Command Buffer, Clear Command Buffer.
- Interface options: I2C Standard Mode, I2C Fast Mode (selected), GPIO.

At the bottom, a status bar shows: **TLV320AIC3106 - Connected** with a Disconnect button.