cedargrove waveviz

A CircuitPython class to create a positionable *displayio.TileGridGroup* object from a *synthio.ReadableBuffer* wave table. The class inherits all properties of a TileGrid object including *bitmap*, *pixel_shader*, *x*, *y*, and provides the bitmap properties of *width*, *height*.

https://github.com/CedarGroveStudios/CircuitPython_WaveVizhttps://docs.circuitpython.org/en/latest/shared-bindings/displayio/#displayio.TileGrid

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Implementation Notes

Software and Dependencies:

Adafruit CircuitPython firmware for the supported boards: https://circuitpython.org/downloads

class cedargrove_wavebuilder.WaveViz(*, wave_table, x, y, width,height, plot_color=0x00FF00, grid_color=0x808080, back_color=None)

Create a positionable displayio.TileGrid object from a synthio.ReadableBuffer wave table.

Parameters:

- wave_table The synthio waveform object of type 'h' (signed 16-bit). No default.
- **x** The tile grid's x-axis coordinate value. No default.
- y The tile grid's y-axis coordinate value. No default.
- width The tile grid's width in pixels. No default.
- height The tile grid's height in pixels. No default.
- plot_color The waveform trace 24-bit integer RGB color value. Defaults to 0x00FF00 (green).
- grid_color The perimeter grid 24-bit integer RGB color value. Defaults to 0x808080 (gray).
- back_color The grid background 24-bit integer RGB color value. Defaults to None (transparent).

width

The tile grid's width in pixels. Read-only.

height

The tile grid's height in pixels. Read-only.

max result

The full-scale value of the plotted image (from wave_table). Read-only.