National Semiconductor
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LM4856 Evaluation Package Instructions

The LM4856 Evaluation Package includes the following:

LM4856 Demoboard
I^{2}C Card
I^{2}C Cable
I^{2}C Software

Hardware Installation Instructions:

1) Plug the I^{2}C Card to the parallel port (LPT1) of the PC.
2) Connect the LM4856 Demoboard to the I^{2}C Card with the I^{2}C Cable. Refer to the Silkscreen for the corresponding pin locations of SCL, SDA, extV$_{DD}$ and GND.   The I^{2}C Cable uses the following color coding scheme:

(Green – SCL; Blue – NC; Orange – SDA)
(White/Green – extV$_{DD}$; White/Blue – GND)

SCL	NC	SDA
extV$_{DD}$	GND	NC

I^{2}C Silkscreen Pinout

Green	Blue	Orange
White/Green	White/Blue	

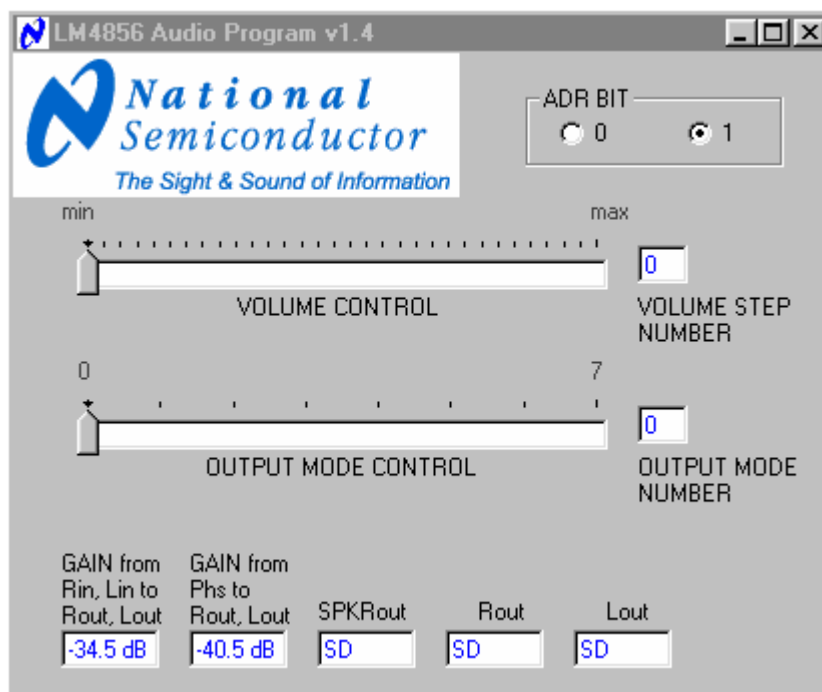Color Code for I^{2}C Cable

I^{2}C Card Instructions:

1) Attach the I^{2}C Card to the PC's parallel port using the I^{2}C Card's male DB-25 connector.
2) The LED indicator on the I^{2}C card will light up when a proper connection is made.
3) Attach the I^{2}C Cable to the I^{2}C Card's corresponding 6-pin header.
4) The I^{2}C Card can be powered up either through the PC's parallel port (pcVdd) or the LM4856 Demoboard's power supply (extVdd).
5) For pcVdd operation, the slide switch on the I^{2}C Card must be set to the pcVdd position.
6) For extVdd operation, the slide switch on the I^{2}C Card must be set to the extVdd position and the jumper (J2) setting on the LM4856 Demoboard must be closed.

LM4856 Demoboard Instructions:

1) The supply pin, ground pin, inputs, and outputs are all easily accessed through the header pins of the LM4856 Demoboard. Each header pin is labeled accordingly on the Demoboard's Silkscreen layer.
2) Attach the I^2C Cable to the LM4856 Demoboard's corresponding 6-pin header.
3) Connect a power supply to the Vdd and GND pin of the LM4856 Demoboard for power-up.

Software Installation Instructions:

1) A Windows95/98 or above operating system is required.
2) Run *setup.exe* to begin the software installation.
3) After the installation is complete, view the *Readme.txt* file. Run *LM4856v4.exe* to begin the software program.

Software Instructions:

1) Volume control and Output Mode Select can be controlled by using the slider bars. The top slider bar controls the volume. The bottom slider bar controls the output mode.
2) The ADR bit setting must correspond to the jumper (J1) setting on the LM4856 Demoboard for proper operation.

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