

TI 网上资源使用简介

Subhead here

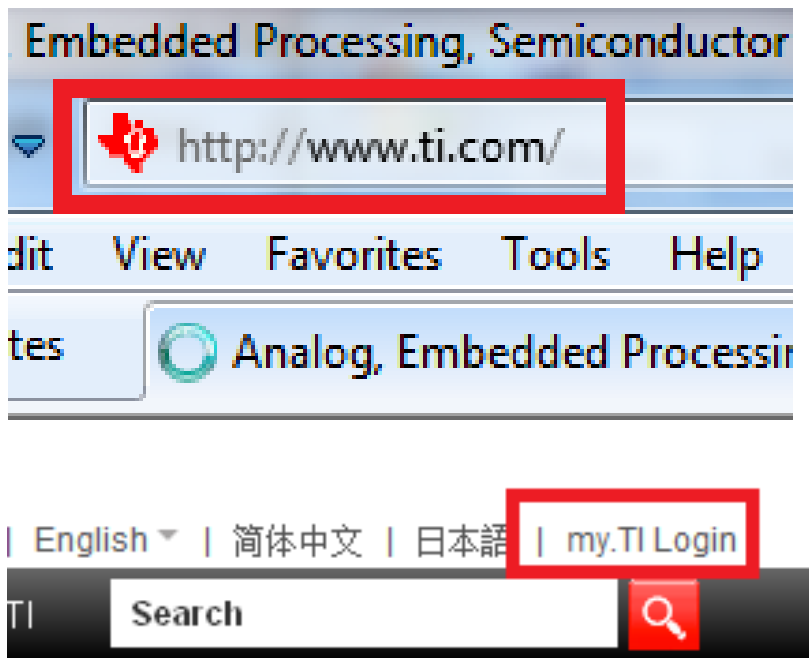
Presenter's Name

目录

- 产品目录查找和选则
- 业界应用资料查找
- 工具和软件
 - WEBENCH设计中心
 - 电源设计
 - 有源滤波器设计
 - TINA-TI仿真软件
 - Selguide 放大器选型软件
 - FilterPro 滤波器设计
- 技术支持
- 样片申请

网上注册 my.TI账号

在使用TI免费软件和申请样片时，需要注册my.ti账号，请使用university, edu.cn等关键字填写注册信息



- 好处：可以申请TI的样片，可以使用TI网站内的免费软件
- 第一步：登陆TI官网 www.ti.com
- 第二步：进入 my.TI Login界面
- 第三步：输入新用户信息，点击“注册并继续”
- 第四步：登陆邮箱进行验证（不验证的话只是访客身份）

产品目录查找和选则

- TI拥有范围广泛的芯片产品，涉及电子产品的各个领域，使用网站资源进行查阅和选型可以事半功倍。登陆TI的官网www.ti.com.cn进入产品目录页面



按产品浏览

放大器和线性器件

音频

宽带 RF/IF 和数字音频广播

时钟和计时器

数据转换器

DLP® 和微机电系统 (MEMS)

高可靠性产品

接口

逻辑

DLP® - 电视、投影仪和影院

查看新产品

电源管理

处理器

- ARM® 处理器

- 数字信号处理器 (DSP)

- 微控制器 (MCU)

- OMAP™ 应用处理器

模拟开关和多路复用器

温度传感器与控制 IC

无线连接

教育技术与计算器

• 点击分类后可以进入产品结构树，例如运放结构树，可以选择更细的分类

产品结构树

运算放大器 (Op Amp) (1405)

高速放大器 ($\geq 50\text{MHz}$) (263)

音频运算放大器 (46)

比较器 (170)

仪表放大器 (43)

单电源 (24)

双电源 (19)

差分放大器 (25)

电流分流监测器 (85)

标准共模电压 ($< 60\text{V}$) (32)

- 标准 CMV - 模拟电流输出 (4)

- 标准的 CMV - 模拟电压输出

隔离放大器 (3)

传感器、传感器调节、4-20mA 发送器

4-20mA 调节 (15)

有源滤波器 (3)

传感器调节 (10)



TEXAS INSTRUMENTS

产品目录查找和选则

- 在产品树中可以打开相应的筛选页面，方便查找筛选

浏览其他产品 发送邮件 下载 书签		<div style="background-color: #f0f0f0; padding: 5px; border: 1px solid #ccc;"> 添加隐藏 参数列 </div>												Rating
Status	Number of Channels	Total Supply Voltage (Min) (+5V=5, +/-5V=10)	Total Supply Voltage (Max) (+5V=5, +/-5V=10)	GBW (Typ) (MHz)	Slew Rate (Typ) (V/us)	CMRR (Min) (dB)	Vn at 1kHz (Typ) (nV/rtHz)	Vio (25C) (Max) (mV)	IIB (Max) (pA)	Iq per channel (Max) (mA)	Offset Drift (Typ) (uV/C)			
总数: 259 匹配: 259 <div style="background-color: #ffff00; padding: 5px; text-align: center; margin-top: 10px;"> 重置 </div>	<input type="checkbox"/> ACTIVE <input type="checkbox"/> PREVIEW <input type="text" value="4"/>	<input type="text" value="4"/>	<input type="text" value="30"/>	<input type="text" value="100"/>	<input type="text" value="400"/>	<input type="text" value="70"/>	<input type="text" value="110"/>	<input type="text" value="60"/>	<input type="text" value="15"/>	<input type="text" value="30,000,000"/>	<input type="text" value="10"/>	<input type="text" value="23"/>	<input type="checkbox"/> Auto <input type="checkbox"/> Cata <input type="checkbox"/> HiRe <input type="checkbox"/> Milita <input type="checkbox"/> Spac	
	<input type="text" value="1"/>	<input type="text" value="1.4"/>	<input type="text" value="3.6"/>	<input type="text" value="0.1"/>	<input type="text" value="0.05"/>	<input type="text" value="50"/>	<input type="text" value="2.5"/>	<input type="text" value="0.15"/>	<input type="text" value="60"/>	<input type="text" value="0.037"/>	<input type="text" value="0.1"/>			
比较														
<input type="checkbox"/> LMV358 - 双路低电压轨至轨输出运算放大器	新 ACTIVE	2	2.7	5.5	1	1	50	39	7	250000	0.17	5	Catalog	
<input type="checkbox"/> RC4580-Q1 - 汽车类双路音频运算放大器	ACTIVE	2	4	32	12	5	80	6.2	3	500000	4.5		Automo	
<input type="checkbox"/> TL072-EP - 增强型产品双路低噪声 JFET 输入通用运算放大器	HiRel ACTIVE	2	30	36	3	13	80	18	9	200	2.5	18	HiRel Er	
<input type="checkbox"/> TL074-EP - 增强型产品四路低噪声 JFET 输入通用运算放大器	HiRel ACTIVE	4	30	36	3	13	80	18	9	200	2.5	18	HiRel Er	
<input type="checkbox"/> LM148-N - 串联四路 741 运算放大器	HiRel ACTIVE	4	10	44	0.9	0.5	70	60	5	325000	0.9		Military	
<input type="checkbox"/> LM124-SP - 四路运算放大器	HiRel ACTIVE												Space	
<input type="checkbox"/> LMV341-Q1 - Automotive Catalog Single Rail-To-Rail Output CMOS Operational Amplifier with Shutdown	ACTIVE	1	2.5	5.5	1	1	56	40	4	120	0.17	1.7	Automo	
<input type="checkbox"/> TL974-Q1 -	ACTIVE	4	2.7	12	12	5	60		4	750000	2.8	5	Automo	
<input type="checkbox"/> TL971-Q1 -	ACTIVE		2.7	12	12	5	60		4	750		5	Automo	
<input type="checkbox"/> TL972-Q1 -	ACTIVE				12	5	60		4	750		5	Automo	

业界应用资料查找

- TI提供覆盖各个领域的系统应用，轻松点击“应用”界面即可得到全面的系统级应用资料



- 系统级应用资料包括如下部分，涉及工业、家电、通信和航空航天等各个领域

查找方框图、应用手册、工具与软件

安防和安全

工业应用

计算和多媒体

替代能源

汽车和运输

视频&视觉

通信与电信

消费和便携电子设备

医疗和保健

宇航、航空电子设备和国防

电机驱动与控制

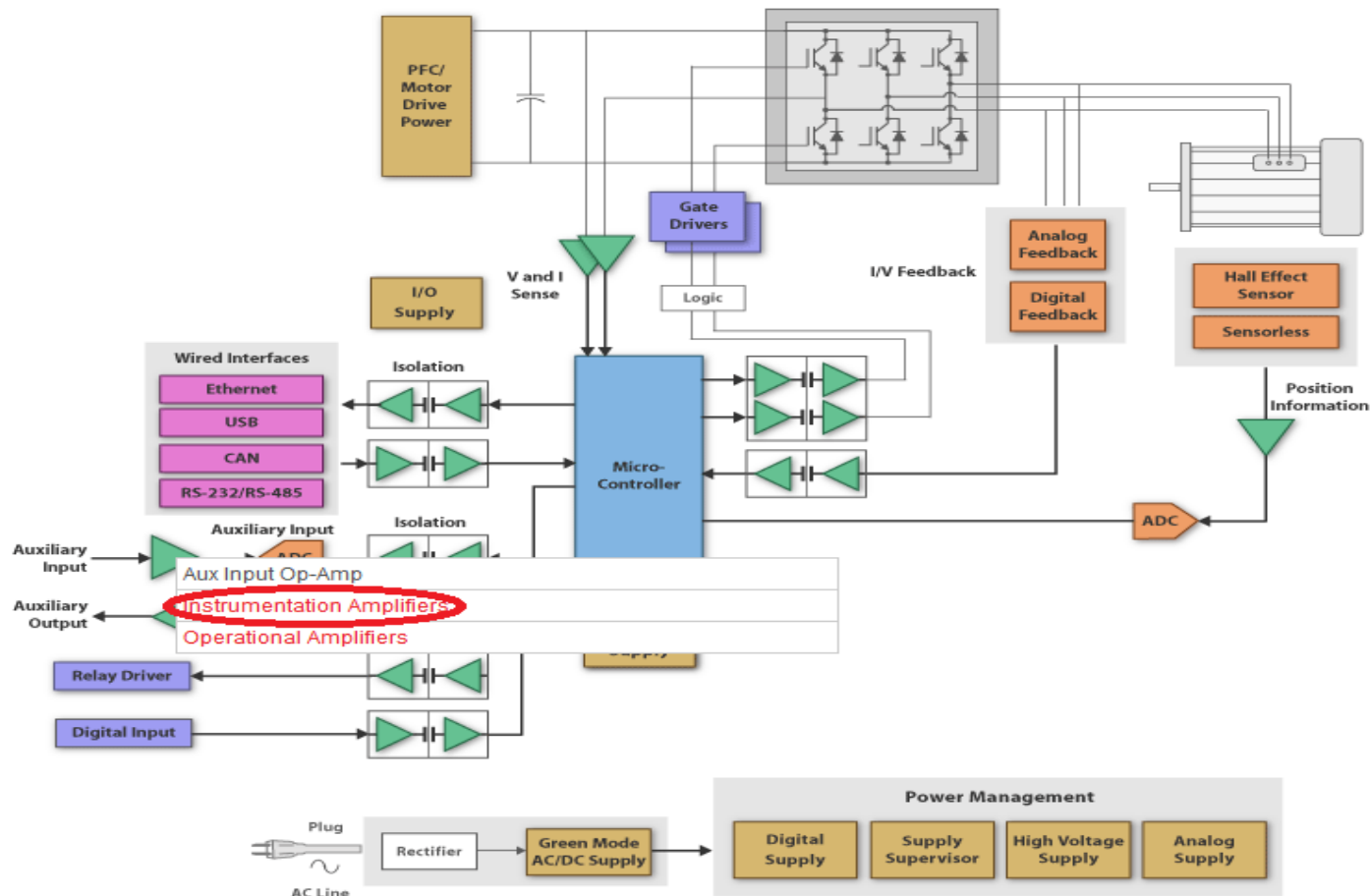
自动化和过程控制

照明

智能电网

业界应用资料查找

- 只需点击进入即可看到业界最新的系统解决方案架构图。用鼠标放在每个方框上，您将看到对应的芯片，可谓自顶向下设计的得力工具！



工具和软件

- TI为相应芯片提供了方便的设计支持工具，使工程师摆脱部分繁杂的劳动，集中精力到系统的设计上来。包括模拟和处理器部分。

产品 应用 **工具与软件** 支持与社区 样片与购买 关于 TI

模拟

WEBENCH® 设计中心工具

TINA-TI™ - 电路仿真

WEBENCH® Designer MyDesigns

功率 FPGA/μP 传感器 LED

输入您的供电要求:

直流 交流

输入电压 最小 14.0 V 最大 22.0 V

输出电压 输出电流

输出 3.3 V 2.0 A

环境温度 30 °C

多负载 单输出

Power Architect **开始设计**

微控制器, ARM, DSP

工具与软件 - 微控制器, ARM, DSP

安卓 (Android)

Linux

包含 TI-RTOS & SYS/BIOS 的 RTOS™

与 O/S 无关的软件

开发工具包括 Code Composer Studio IDE

设计套件和评估模块

支持和社区

适用于 TI 处理器的软件和工具

MSP430™ 16 位超低功耗 MCU

TM4C ARM Cortex-M4 工具与软件

C2000™ 32位实时 MCU

安全 ARM MCU 工具与软件

Sitara™ ARM® Cortex™-A8 & ARM9™ 处理器

KeyStone 多核 ARM 处理器

KeyStone 多核 DSP

KeyStone™ 多核 DSP + ARM®

库, 驱动程序, 工具与示例代码

MSP430Ware

StellarisWare®

用于 C2000 的 ControlSuite™

用于 ARM® Sitara 处理器的 StarterWare

用于 ARM® & DSP 处理器的 StarterWare

用于 C6000 DSP 的 StarterWare

查看更多特色库

工具和软件 - WEBENCH设计中心

- 进入“工具与软件”可以看到TI的WEBENCH设计中心。WEBENCH设计中心提供了TI的多款辅助设计软件。覆盖电源、时钟、模拟电路仿真、滤波器设计等等。（建议从英文版网站进入WEBENCH，英文版更新的更及时<http://www.ti.com/lscs/ti/analog/webench/overview.page>）



WEBENCH® Design Center
Get results faster with easy-to-use design tools that deliver custom results.

▶ Start your design today for free

WEBENCH Design Center

WEBENCH Architect Tools

- > Power Architect (multi supply)
- > System Power Architect

WEBENCH Designer Tools

- > Power (single supply)
- > Power Designer Parts Listing
- > LED (enter LED)
- > Sensor AFE & Sensor Interface
- > Medical AFE Designer
- > WEBENCH Export
- > Amplifiers
- > WEBENCH Filter Designer (Beta)
- > EasyPLL
- > Clock Tree Builder
- > All WEBENCH Tools

TINA-TI™ - Downloadable Circuit Simulation

- > Spice Simulation Tool
- > Free form Schematic Capture

Download Models

- > SpiceRack - A Complete list of SwitcherPro™, PSpice, Tina-TI™ Reference Designs and Spice Models
- > Complete SPICE Model Libraries
- > IBIS and BSDL Model Libraries
- > CAD Symbol Downloads

Supply Chain Partners:

Related Resources

- > PowerLab™ Reference Design Library
- > Hardware Design Tools and Software
- > Application Notes/Technical Documents
- > Packaging Information
- > WEBENCH Design Center Brochure
- > WEBENCH Design Center Videos
- > History of Internet Innovation

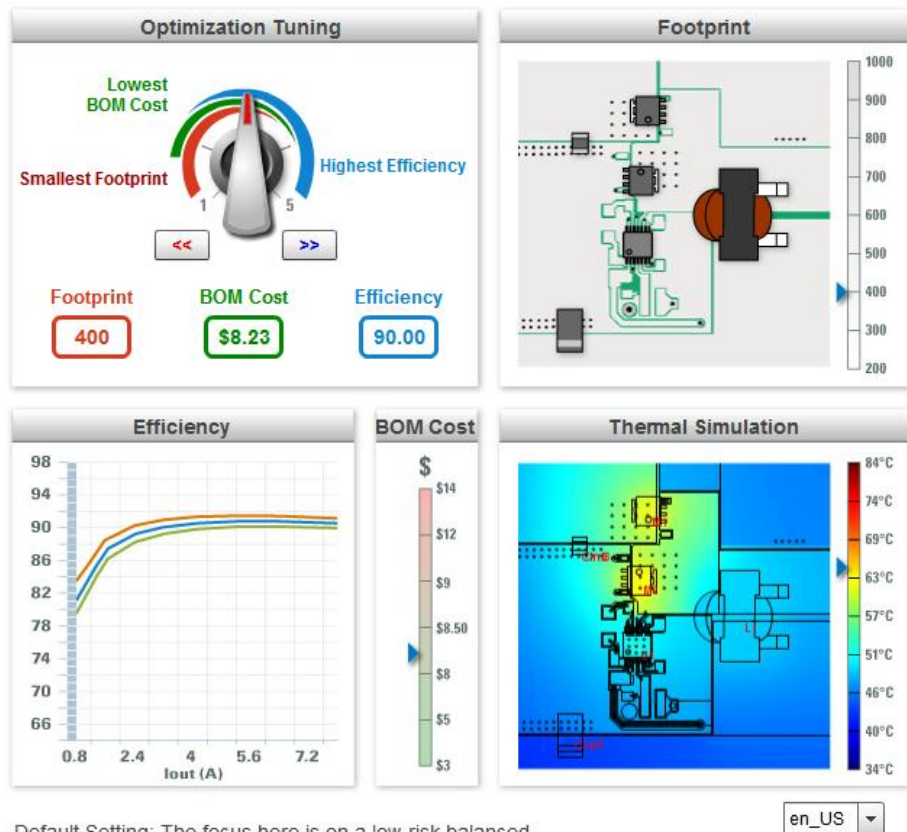


WEBENCH Design Center Brochure: Get results faster with easy-to-use design tools that deliver custom results.

[Download Now!](#)

工具和软件 – WEBENCH电源设计

- WEBENCH提供强大的开关电源设计和仿真，点击start design即可开始设计 <http://www.ti.com/lstds/ti/analog/webench/power.page>



Default Setting: The focus here is on a low risk balanced design where Efficiency, Footprint, and BOM Cost have equal weight in the selection of the regulator and supporting components. For the devices with adjustable frequencies, the center frequency is selected.

WEBENCH电源设计支持:

- 电源的方案优化
- 电源效率仿真
- 电源时域的稳态和暂态仿真
- 电源热仿真
- 电源PCB设计参考
- 原理图导出
- FPGA电源设计
- 处理器电源设计
- LED电源设计

工具和软件 – WEBENCH电源设计

- WEBENCH是在线软件，不用下载，连接网络即可使用。

New Solutions Visualizer Assistant

VISUALIZER

WEBENCH® Optimizer

Lowest BOM Cost
Smallest Footprint
Highest Efficiency

Footprint: **310**
BOM Cost: **\$1.61**
Efficiency: **79%**

Change Inputs

DC AC

Vin Min: 14 V
Vin Max: 22 V
Vout: 3.3 V Iout: 2 A
Amb. Temp: 30 °C

Show Alternate Topologies
Show Only Modules

Recalculate

Feature Filters

IC Package: All

On/Off Pin Adj Ipk Lim
 Error Pin Adj Frequency
 Soft Start Sync Switching
 Ext Sync Controller
 Module Integrated Switch
 LDO Automotive

Filter Results

Efficiency 74% 93% Vout-pp 0.69mV 301.17mV
(>=): _____ (<=): _____

Footprint 245mm² 951mm² Frequency: 150kHz 1000kHz
(<=): _____ (>=): _____

BOM Cost \$0 \$18 Crossover: 0kHz 82kHz
(<=): _____ (>=): _____

BOM Count 5 34 Phase 0° 103°
(<=): _____ (>=): _____

Margin: _____

Advanced Charting

X Axis: Efficiency Y Axis: Footprint Bubble Size: BOM Cost

Smallest & Most Efficient

Reset Plot Click and drag to zoom

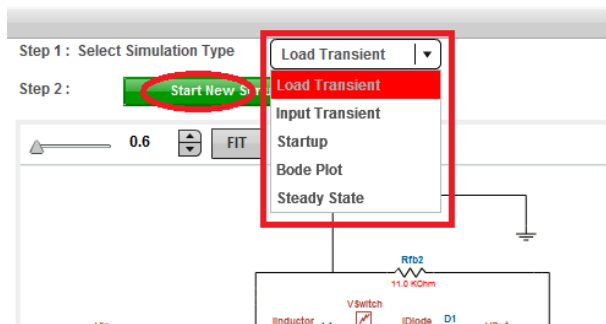
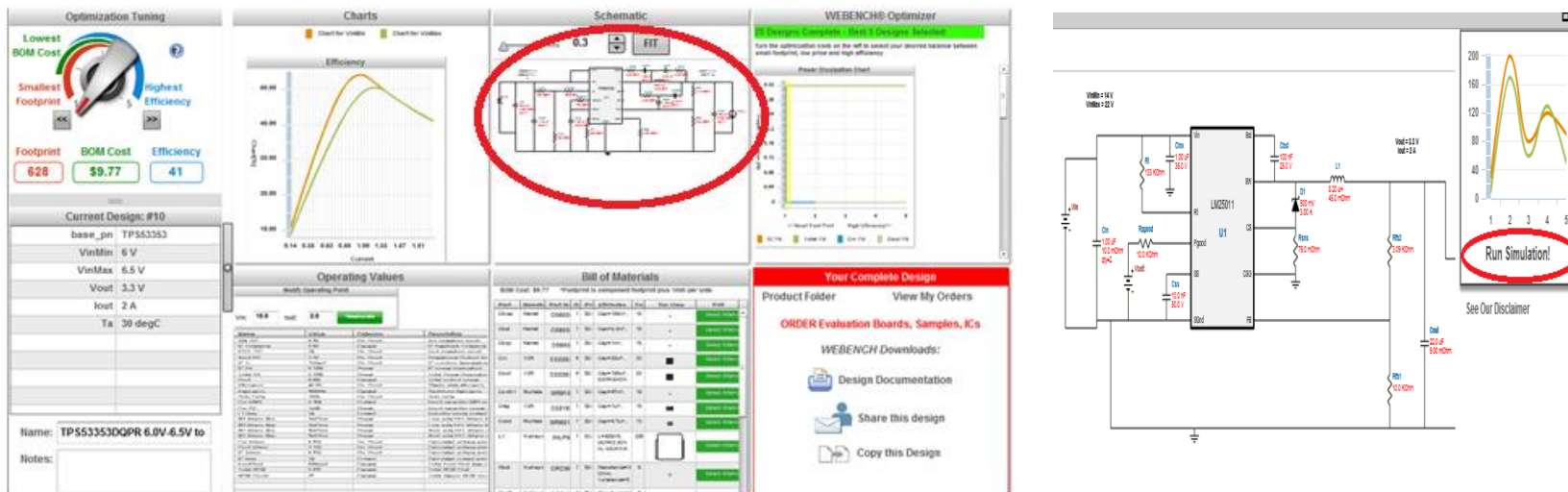
Solutions

Search Solutions: (106 found) Show All Columns Show Additional Devices Show Why Other Parts Were Not Found

Part	Create	WEBENCH® Tools	Schematic	BOM Images	Design Considerations	BOM Footprint (mm²)	BOM Cost	Eff (%)
LM25011	Open Design			310mm²	COT BUCK regulator with adjustable current limit	310	\$1.61	79%
LM25005	Open Design			422mm²	Fast Transient Response	422	\$2.12	83%
LM3150	Open Design				SIMPLE SWITCHER(r)	482	\$2.98	93%

工具和软件 – WEBENCH电源设计

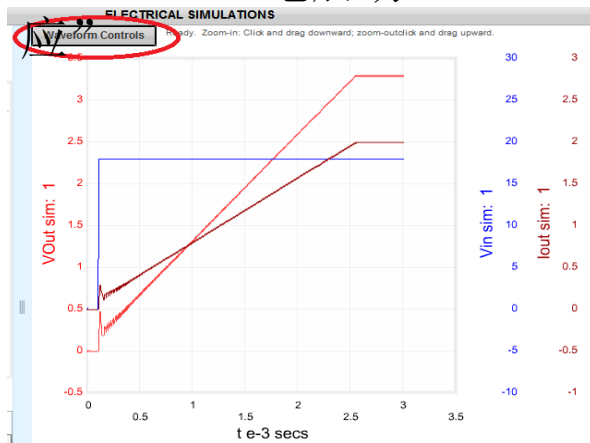
- WEBENCH工具不只能对芯片进行选型，也可以对电源芯片进行仿真。在上述电源设计的过程中，会看到设计面板。点击原理图后即可进入电源电路，可以看到右上角有Run Simulation，可以对电路进行仿真



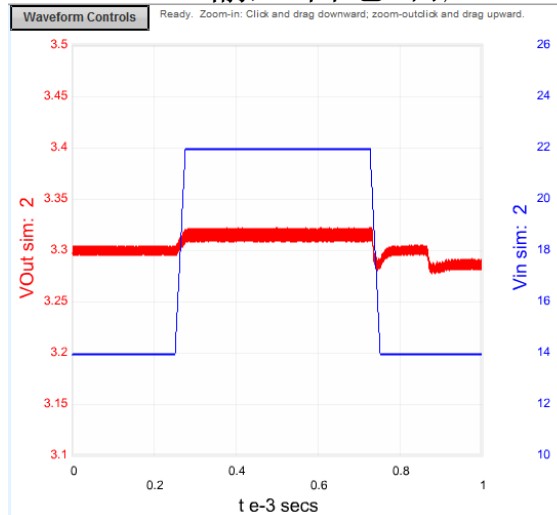
- 进入仿真界面，可以看到左上角的下拉菜单中的仿真项,分别可以对电源的负载暂态响应“输入暂态响应”“上电”“波特图”“稳态”进行仿真。
- 在选择了带有外部补偿电路的芯片才可以进行“波特图”仿真（有comp管脚）。

工具和软件 – WEBENCH电源设计

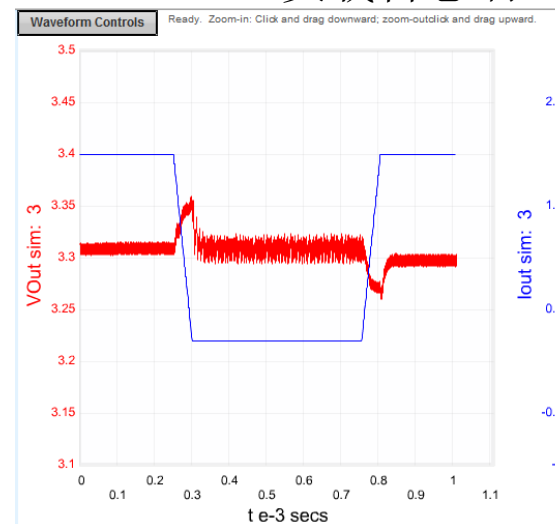
“上电启动”



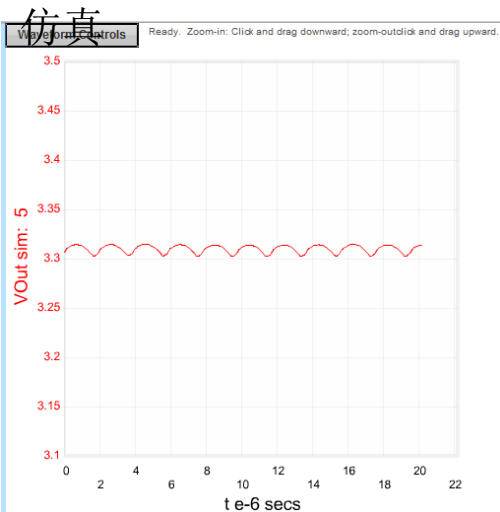
“输入暂态响应”



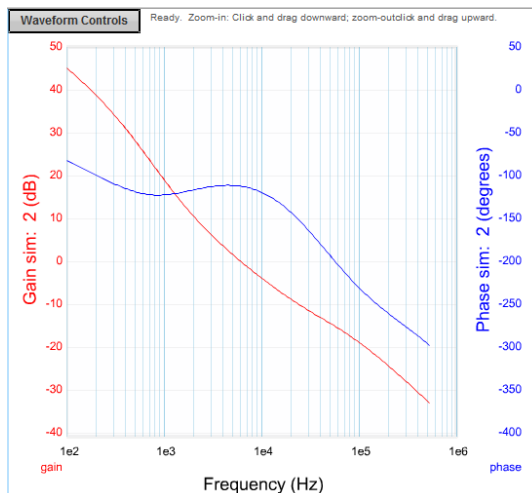
“负载暂态响”



“稳态” 仿真

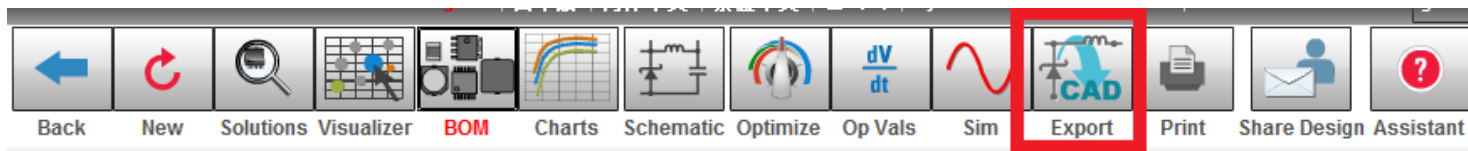


“波特图”

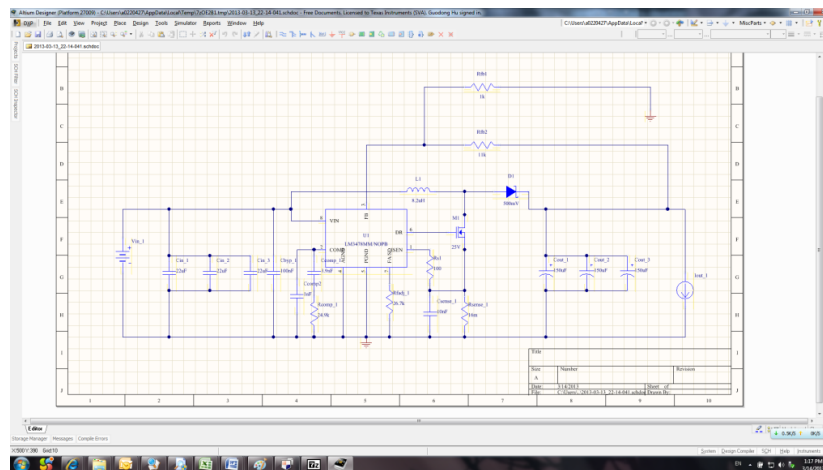
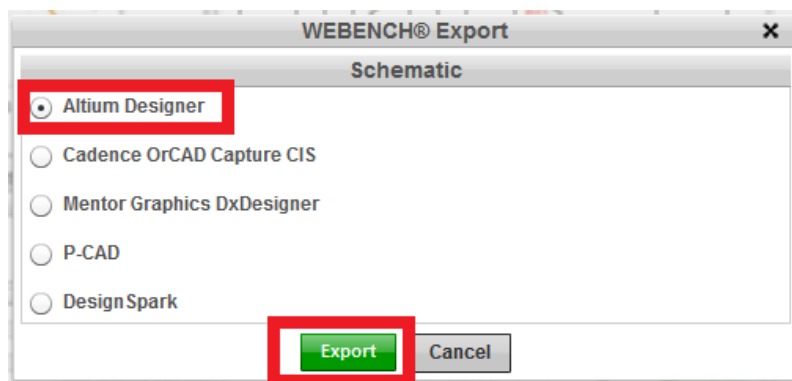


工具和软件 – WEBENCH电源设计

- 设计好电源后，可以对设计原理图进行导出，在WEBENCH界面的第一行可以看到“CAD export”按钮，控制对原理图的导出



- 点击“CAD export”按钮后，打开导出对话框



- 将Altium格式的原理图下载保存后，用Altium打开可以看到设计好的电源原理图。需要注意的是元件封装没有包含在原理图中，需要用户根据实际采购的物料加入封装信息，然后导入PCB进行电路板设计

工具和软件 – WEBENCH滤波器设计

- WEBENCH同时也支持有源滤波器设计 <http://www.ti.com/lscs/ti/analog/webench/webench-filters.page>
- 输入滤波器的截止频率、阻带频率、阻带衰减、平坦度、群延时和阶跃特性后即可开始设计。

FILTER DESIGNER(BETA) REQUIREMENTS

Power LED **LED Architect** Power Architect FPGA/μP HotSwap Simple Switcher **Filters**

Filter Type

Lowpass
 Highpass
 Bandpass
 Bandstop

Click to design with default Filter Order and default Filter Response.

Start Filter Design

Attenuation

Cutoff Frequency(f_c): Hz
Gain(A_o): V/V dB

Search Filter Response Pick Filter Response

Stopband

Stopband Attenuation(A_{sb}): dB
Stopband Frequency(f_s): Hz

Enter Flatness Specs
 Enter Group Delay Flatness Specs
 Enter Step Response Specs

Start Filter Design

工具和软件 – WEBENCH滤波器设计

- 选择滤波器的传输响应类型，并用optimizer优化



工具和软件 – WEBENCH滤波器设计

- 进入电路设计，可以改变运放、外围元件、阶数等

FILTER DESIGNER(BETA) DESIGN SUMMARY

WEBENCH® Optimizer

Lowest BOM Cost | Smallest Footprint | Sensitivity

Op-Amp: OPA827AID [Select Alternate](#)

Filter Topology Specification

Topology: Sallen Key

CapSeedValue: 1e-9

Res Tolerance: E192(0.5%)

Cap Tolerance: E6(20%) [Update](#)

Tweak Design

Response: 0.2dB Chebyshev

Order: 4 [Update](#)

Current Design: #137

Name: Lowpass, Sallen Key, Chebyshev 0.2 dB

Notes:

[Save Name & Notes](#) [Print](#) [Share](#)

Your Complete Design

Stage: 1

Second Order Topology: Sallen Key Gain: 1

Cutoff Frequency: 56.088 KHz Q: 0.646

Min OpAmp GBWP: 3.623 MHz [Update](#)

Stage: 2

Second Order Topology: Sallen Key Gain: 1

Cutoff Frequency: 87.586 KHz Q: 2.435

Min OpAmp GBWP: 21.327 MHz [Update](#)

Schematic

Bill of Materials

Part	Manufacturer	Part Number	Price	Value	Footprint	Top Vie	Edit
A1	Texas Instruments	OPA827AID	\$4.50	N/A	N/A		Select Alternate Part
C1	Yageo America	CC0805KRX7R9BB102	\$0.01	1.00nF	13.0		Select Alternate Part
C2	Yageo America	CC0805KRX7R9BB222	\$0.01	2.20nF	13.0		Select Alternate Part
R1	Vishay-Dale	CRCW08051K10FKEA	\$0.01	1.10KΩ	13.0		Select Alternate Part
R2	Vishay-Dale	CRCW08053K24FKEA	\$0.01	3.24KΩ	13.0		Select Alternate Part

Part	Manufacturer	Part Number	Price	Value	Footprint	Top Vie	Edit
A1	Texas Instruments	OPA827AID	\$4.50	N/A	N/A		Select Alternate Part
C1	Yageo America	CC0805KRX7R9BB102	\$0.01	1.00nF	13.0		Select Alternate Part
C2	MuRata	GRM033R60J333KE01D	\$0.01	33.0nF	5.9799999		Select Alternate Part
R1	Vishay-Dale	CRCW0805174RFKEA	\$0.01	174Ω	13.0		Select Alternate Part
R2	Vishay-Dale	CRCW0805562RFKEA	\$0.01	562Ω	13.0		Select Alternate Part

工具和软件 – WEBENCH滤波器设计

- 点击“sim”可以对滤波器进行仿真

My Designs/Projects English | 日本語 | 简体中文

Back New Visualizer Schematic **Sim** Print Assistant

FILTER DESIGNER(BETA) SIMULATION

Step 1: Select Simulation Type Closed Loop Freq

Step 2: Start New Simulation

0.4 FIT

Most Recent Simulation Simulation List

Simulations for your WEBENCH design 137

simId	Sim Type	Start Time	Status
1	Closed Loop Freq Response	2013-05-28 23:31	Success

Waveform Controls Ready. Zoom-in: Click and drag downward; zoom-out: click and drag upward.

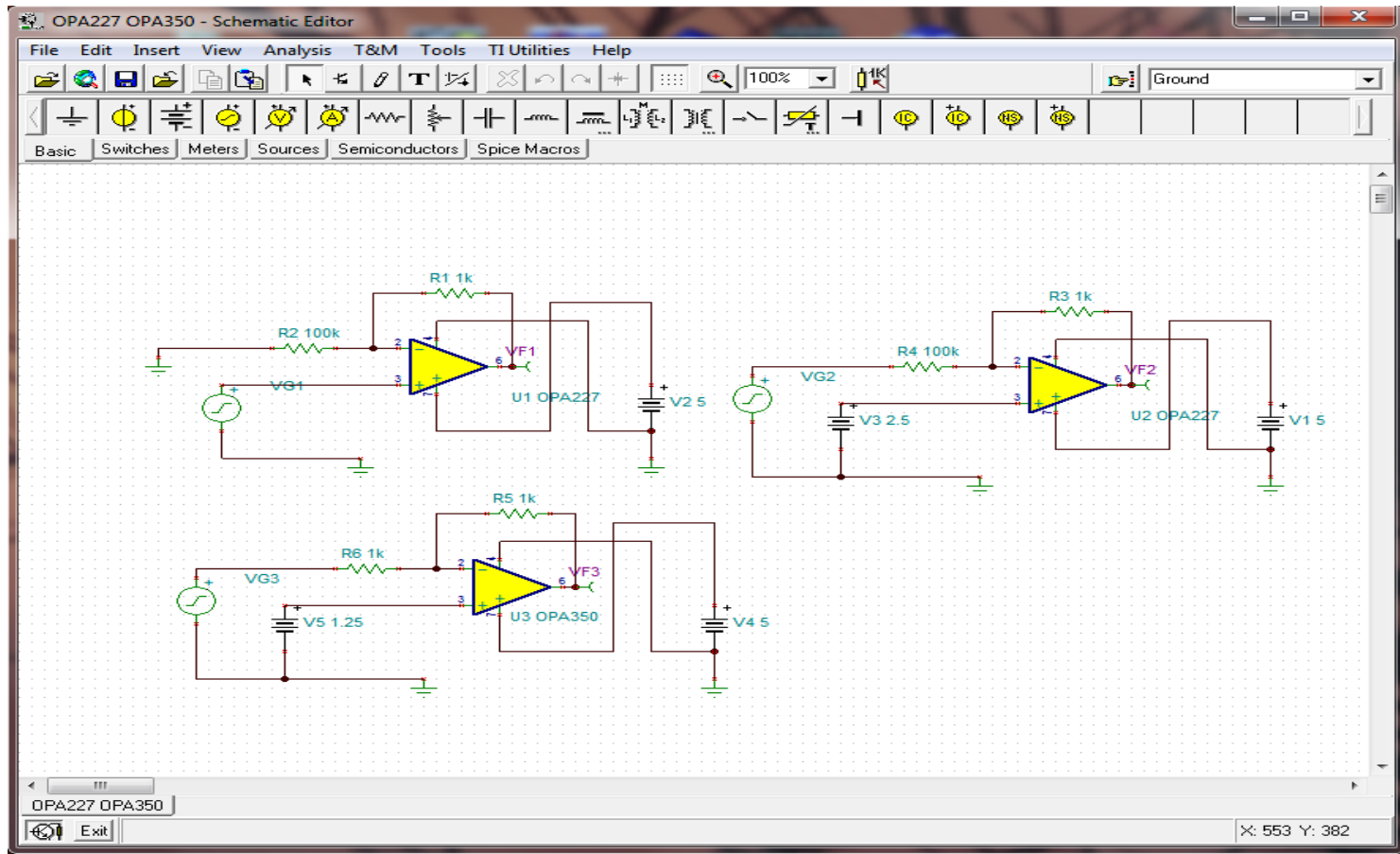
Gain sim: 1 (dB) Phase sim: 1 (degrees)

Frequency (Hz)

Switching Regulators Linear Regulators

工具和软件 - TINA-TI仿真软件

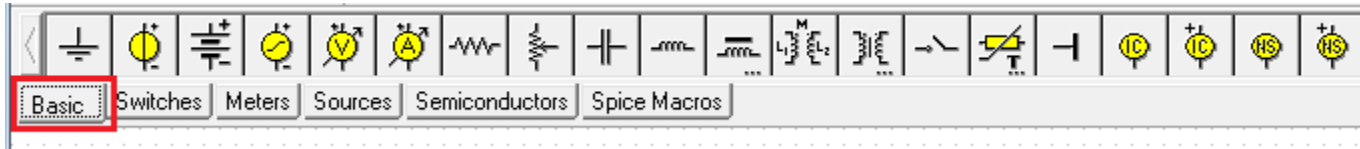
- TINA提供多种模拟器件模型，包括无源器件、晶体管、通用运放、差分运放、差动运放、仪表运放、驱动运放、电流检测运放，开关电源等。配合各种仪表，操作简单，实现软件实验室。<http://www.ti.com/tool/tina-ti> 下载使用



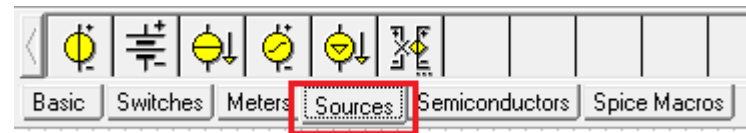
工具和软件 - TINA-TI仿真软件

- 多种多样的元件库，可以满足各种模拟实验和仿真，在搭建实物电路前先进行仿真，排除功能上的错误，并理解电路原理，省时省力。

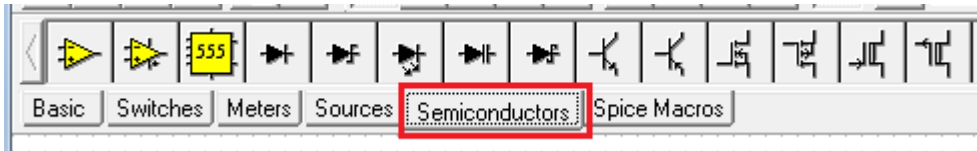
- 基础库



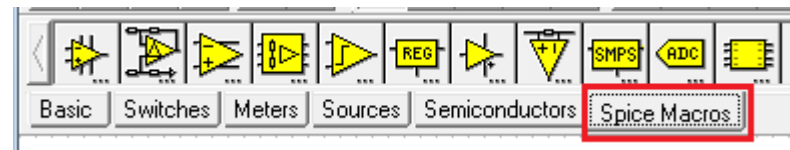
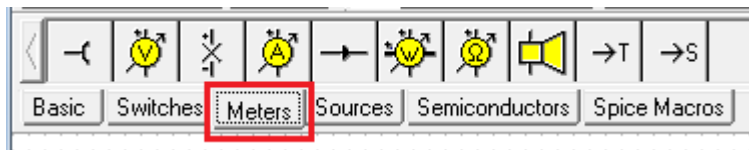
- 开关和源



- 晶体管库

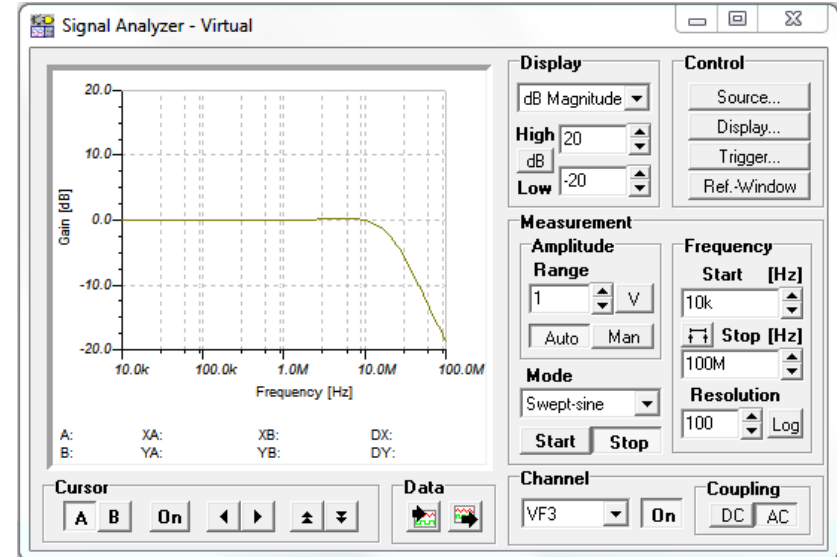
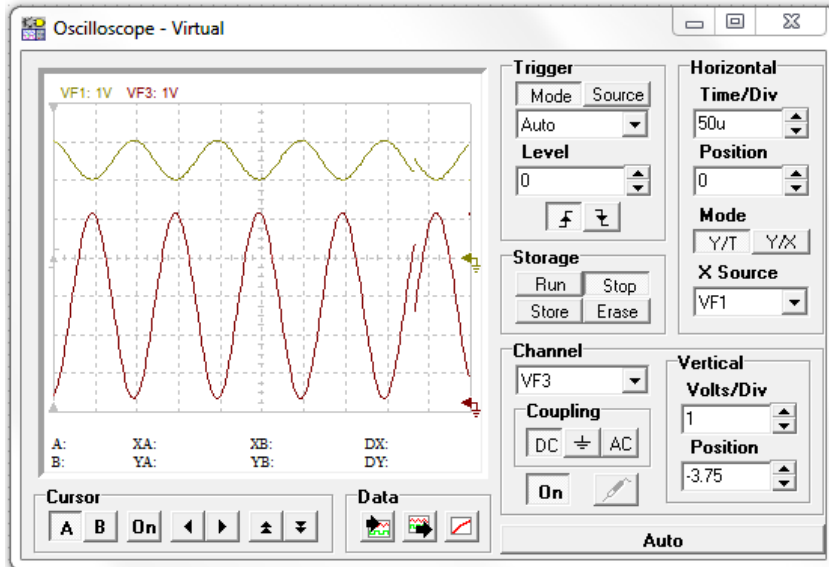
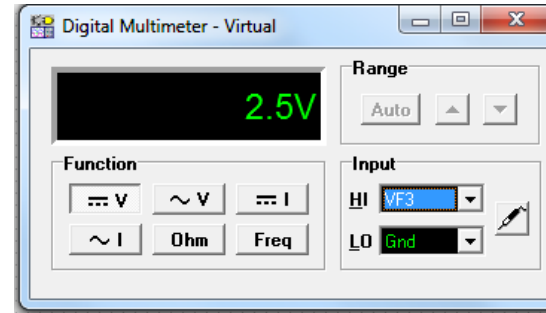
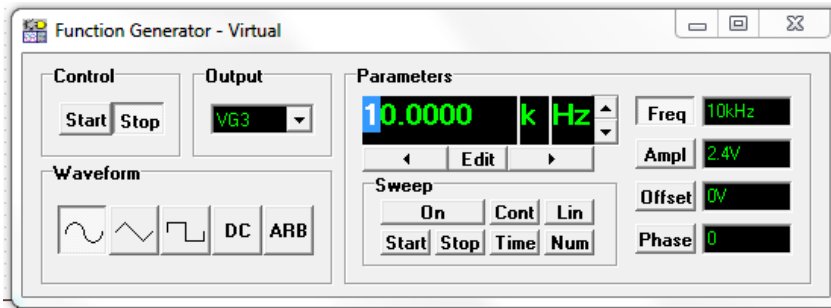


- 仪表库和运放的spice库



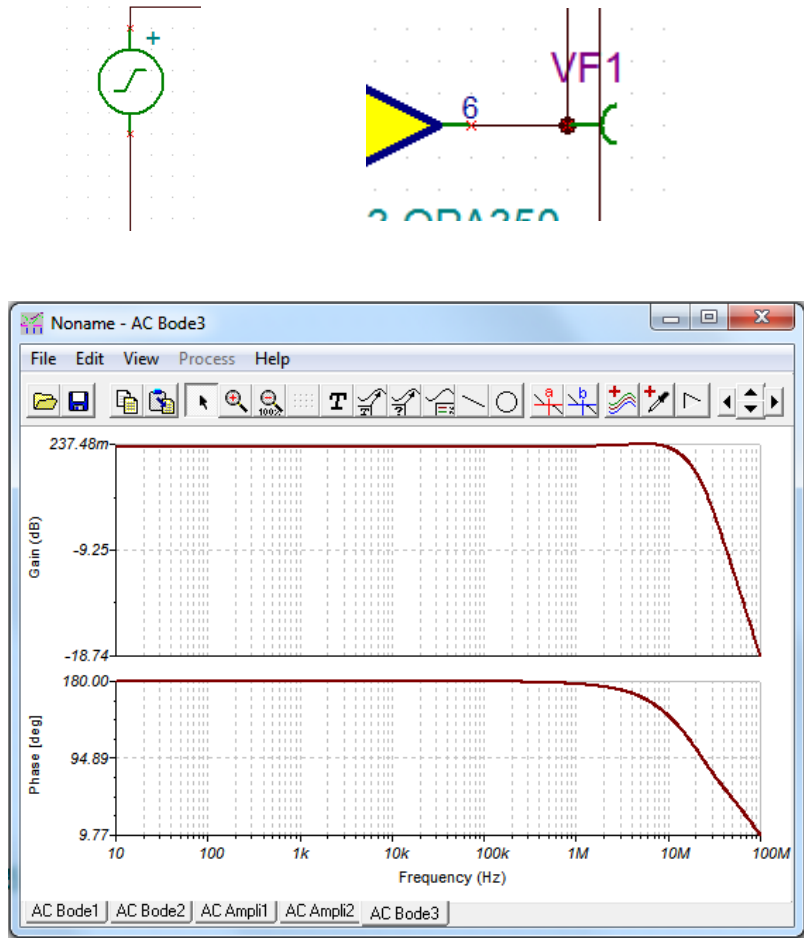
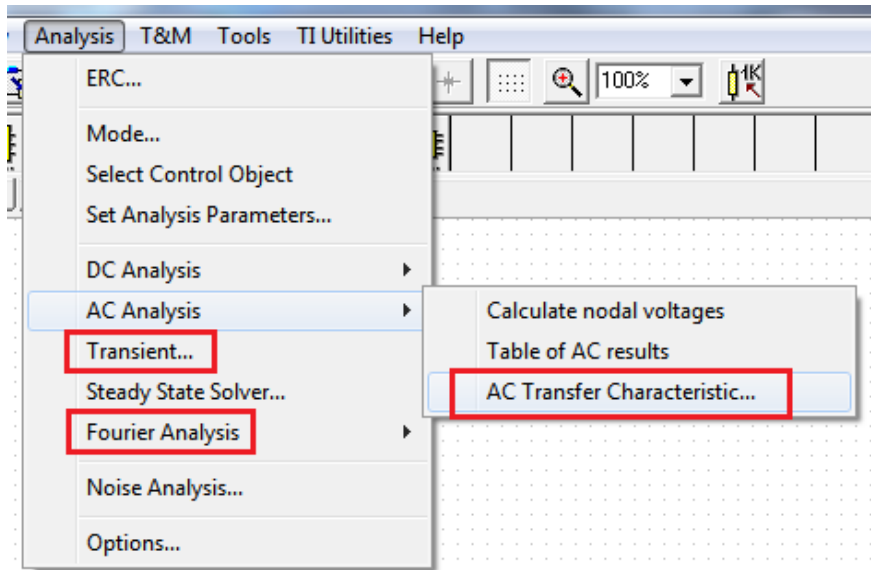
工具和软件 - TINA-TI仿真软件

- 多种类型的虚拟仪表，真正实现软件实验室



工具和软件 - TINA-TI仿真软件

- 高级仿真支持DC，AC，暂态和傅里叶分析。



工具和软件 - Selguide 放大器选型软件

- 在工具和软件的other software中可以找到这个放大器选型软件
- <http://www.ti.com/lscds/ti/analog/webench/overview.page>

Other Software

- > [SwitcherPro™ Software Tool](#)
- > [ADCPro™ Evaluation Software](#)
- > [Calculators and Other Utilities](#)
- > [Thermal Analysis](#)
 - [PCB Thermal Calculator](#)
- > [Ethernet Software & Drivers](#)
- > [Selguide Op Amp Selection Tool](#)
- > [Sensor AFE Tools](#)
- > [Temp SensorEval Software](#)


- <http://www.ti.com/tool/opamps-selguide> 下载使用

Amplifier Product SelGuide Software Status : ACTIVE

OPAMPS-SELGUIDE

 Description/Features

 Technical Documents

 Support & Community

Order Now

Part Number	Buy from Texas Instruments	Status
OPAMPS-SELGUIDE: Amplifier Product SelGuide Software	Download	ACTIVE

工具和软件 - Selguide 放大器选型软件

- Selguide 可以将两个型号的运放关键参数进行对比，是选型的利器！

The screenshot shows the Selguide software interface. At the top, there is a search bar and a menu (File, Edit, Tools, Help). Below the search bar is a 'Contents' pane with a tree view showing 'Operational Amplifiers' selected. The main area is split into two columns, each displaying the details of a selected component.

OPA691ID
Wideband Current Feedback Op Amp with Disable in 8 Pin SOIC
[View Product Information live from Web](#)

Temperature Range: -40 to +85 摄氏度
Package Type: SOIC
Channels: Single
1K OEM Price: \$1.52

All values are typical unless otherwise noted.

VccMin:	4 V
VccMax:	12 V
VinMin:	1.5 from V- rail
VinMax:	-1.5 from V+ rail
VoutMin:	1.1 from V- rail
VoutMax:	-1.1 from V+ rail
Offset voltage (Max):	2.5 mV
Bias current (25 摄氏度 Max):	35 uA
Supply current (Max per Ch):	5.3 mA (per channel)
Output current:	190 mA
Open loop gain:	107 dB
Slew rate:	2100 V/us
Bandwidth:	280 MHz
Voltage noise:	1.7 nV/Sqrt(Hz)
Current noise:	12 pA/Sqrt(Hz)
Differential gain:	0.07 %
Differential phase:	0.02 Deg

OPA656UB
Wideband 500MHz JFET Amplifier in 8 Pin SOIC
[View Product Information live from Web](#)

Temperature Range: -40 to +85 摄氏度
Package Type: SOIC
Channels: Single
1K OEM Price: Contact Sales

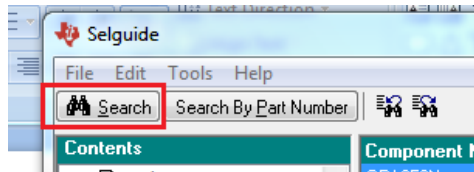
All values are typical unless otherwise noted.

VccMin:	7 V
VccMax:	13 V
VinMin:	0.5 from V- rail
VinMax:	-1.75 from V+ rail
VoutMin:	1.5 from V- rail
VoutMax:	-1.5 from V+ rail
Offset voltage (Max):	0.6 mV
Bias current (25 摄氏度 Max):	5 pA
Supply current (Max per Ch):	16 mA (per channel)
Output current:	50 mA
Open loop gain:	65 dB
Slew rate:	290 V/us
Bandwidth:	500 MHz
Voltage noise:	10 nV/Sqrt(Hz)
Current noise:	0 pA/Sqrt(Hz)
Differential gain:	0.02 %
Differential phase:	0.05 Deg

4 components

工具和软件 - Selguide 放大器选型软件

- 两种选型方式：一种是输入参数范围进行筛选。



A screenshot of the Selguide software interface showing the 'OpAmp Type' selection options. The interface has tabs for 'OpAmp Type', 'Properties', 'AC Parameters', and 'DC Parameters'. Under the 'OpAmp Type' tab, there are several checkboxes: 'Voltage Feedback' (checked), 'Current Feedback', 'Other', 'Disable/Shutdown', 'Rail to Rail Input', and 'Rail to Rail Output' (checked).

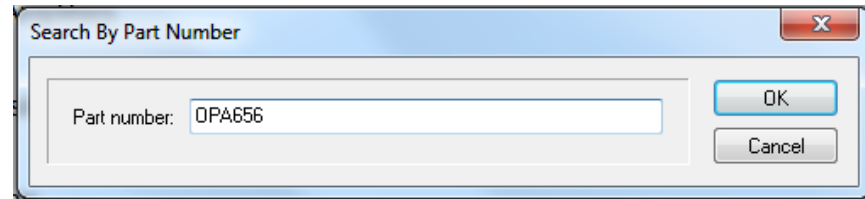
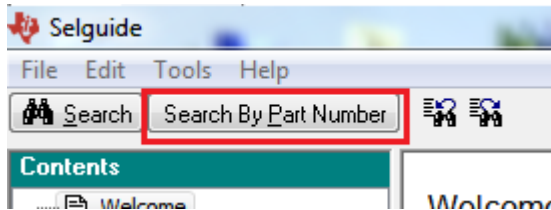
A screenshot of the Selguide software interface showing the 'AC Parameters' selection options. The interface has tabs for 'OpAmp Type', 'Properties', 'AC Parameters', and 'DC Parameters'. Under the 'AC Parameters' tab, there are several input fields with 'Clear' buttons: 'Slew Rate (Typ): >= [] V/us', 'Bandwidth (Typ): >= 20 MHz', 'Voltage Noise (Typ): <= [] nV/Sqrt(Hz)', 'Current Noise (Typ): <= [] pA/Sqrt(Hz)', 'Differential Gain (Typ): <= [] %', and 'Differential Phase (Typ): <= [] deg'.

A screenshot of the Selguide software interface showing the 'Properties' selection options. The interface has tabs for 'OpAmp Type', 'Properties', 'AC Parameters', and 'DC Parameters'. Under the 'Properties' tab, there are three columns of checkboxes: 'Temperature' (Commercial, Industrial, Military, Automotive, Other), 'Parts/Package' (Single, Dual, Triple, Quad, Other), and 'Package Type' (Micro SMD, LLP, SC-70, SOT-23, MSOP, TSSOP).

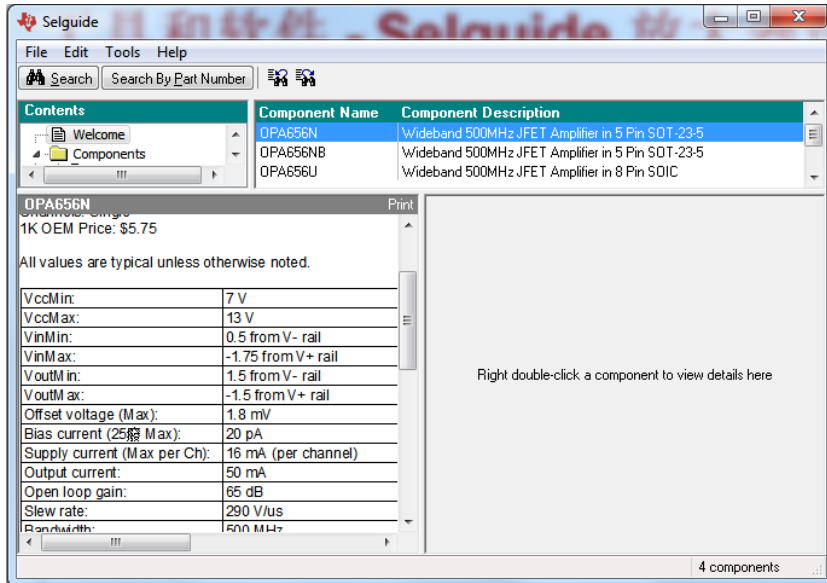
A screenshot of the Selguide software interface showing the 'DC Parameters' selection options. The interface has tabs for 'OpAmp Type', 'Properties', 'AC Parameters', and 'DC Parameters'. Under the 'DC Parameters' tab, there are several input fields with 'Clear' buttons: 'Supply Voltages: V-: -5 V, V+: 5 V', 'Offset Voltage (Max): <= [] mV', 'Supply Current (Max/Ch): <= [] mA', 'Bias Current (Temp Max): <= [] pA', 'Output Current (Typ): >= [] mA', 'Open Loop Gain (Min): >= [] dB', 'Input CMVR (Min): Min: [] V, Max: [] V', and 'Output Voltage (Typ): Min: [] V, Max: [] V'.

工具和软件 - Selguide 放大器选型软件

- 两种选型方式：另一种是输入运放型号进行查找和对比



- 选择运放后“左键双击”显示在左边窗口中，对比的型号“右键双击”显示在右边窗口中



工具和软件 - FilterPro 滤波器设计

- 打开链接<http://www.ti.com/lscs/ti/analog/webench/overview.page>

- 在other software中可以找到FilterPro

Other Software

- > [SwitcherPro™ Software Tool](#)
- > [CodeLoader, Clock Design Tool](#)
- > [FilterPro™ v3.1 Design Software](#)
- > [Power Stage Designer](#)
- > [TI Gadgets and Widgets](#)
- > [Calculators and Other Utilities](#)
- > [Thermal Analysis](#)

- <http://www.ti.com/tool/filterpro> 下载使用

Active Filter Design Application Status : ACTIVE

FILTERPRO

 Description/Features

 Technical Documents

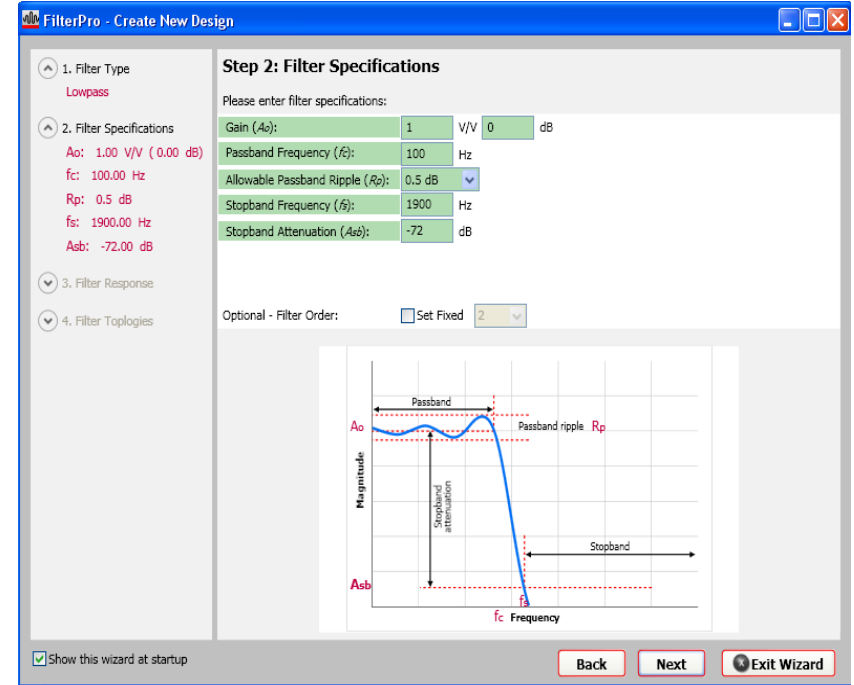
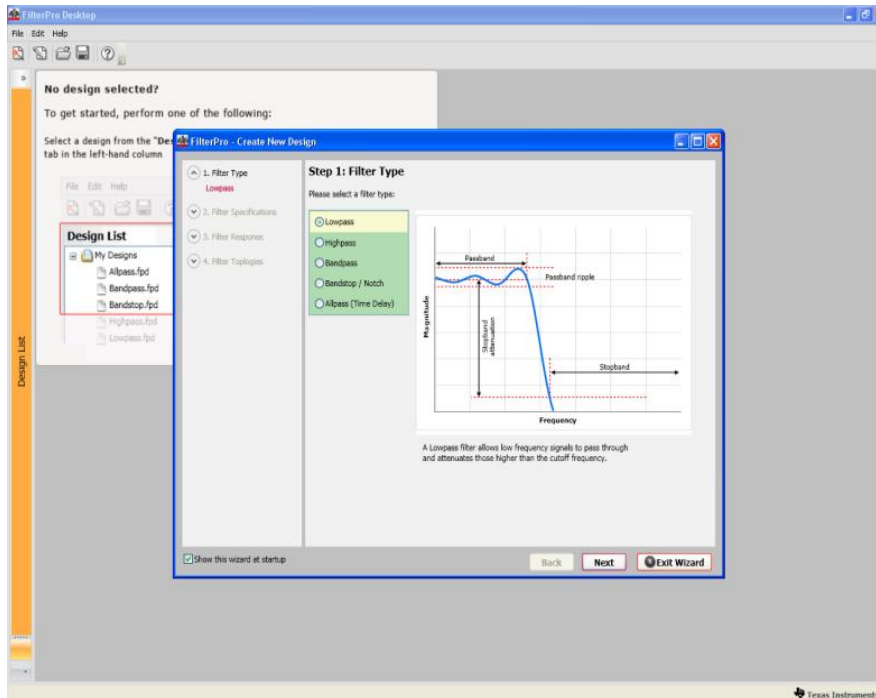
 Support & Community

Order Now

Part Number	Buy from Texas Instruments	Status	OS
FILTERPRO: Active Filter Design Application	Free Register/Download	ACTIVE	Windows XP SP3 and Microsoft .NET Framework 3.5

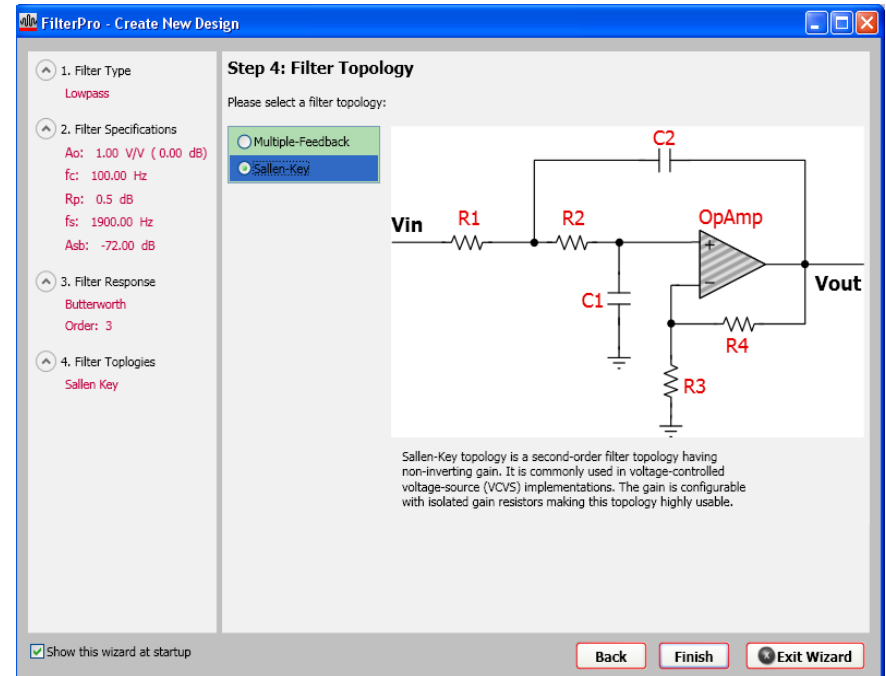
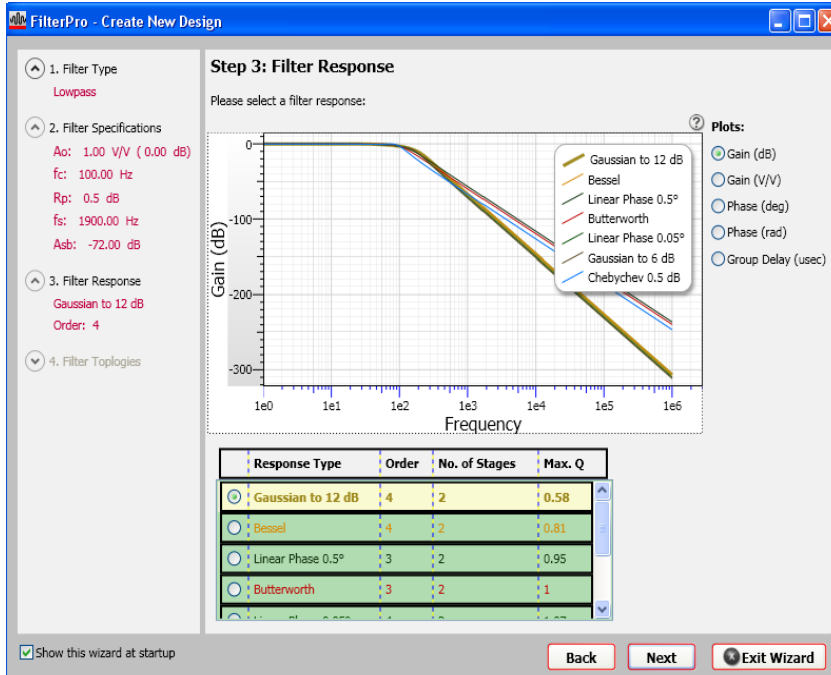
工具和软件 - FilterPro 滤波器设计

- 选择滤波器类型，然后输入滤波器参数



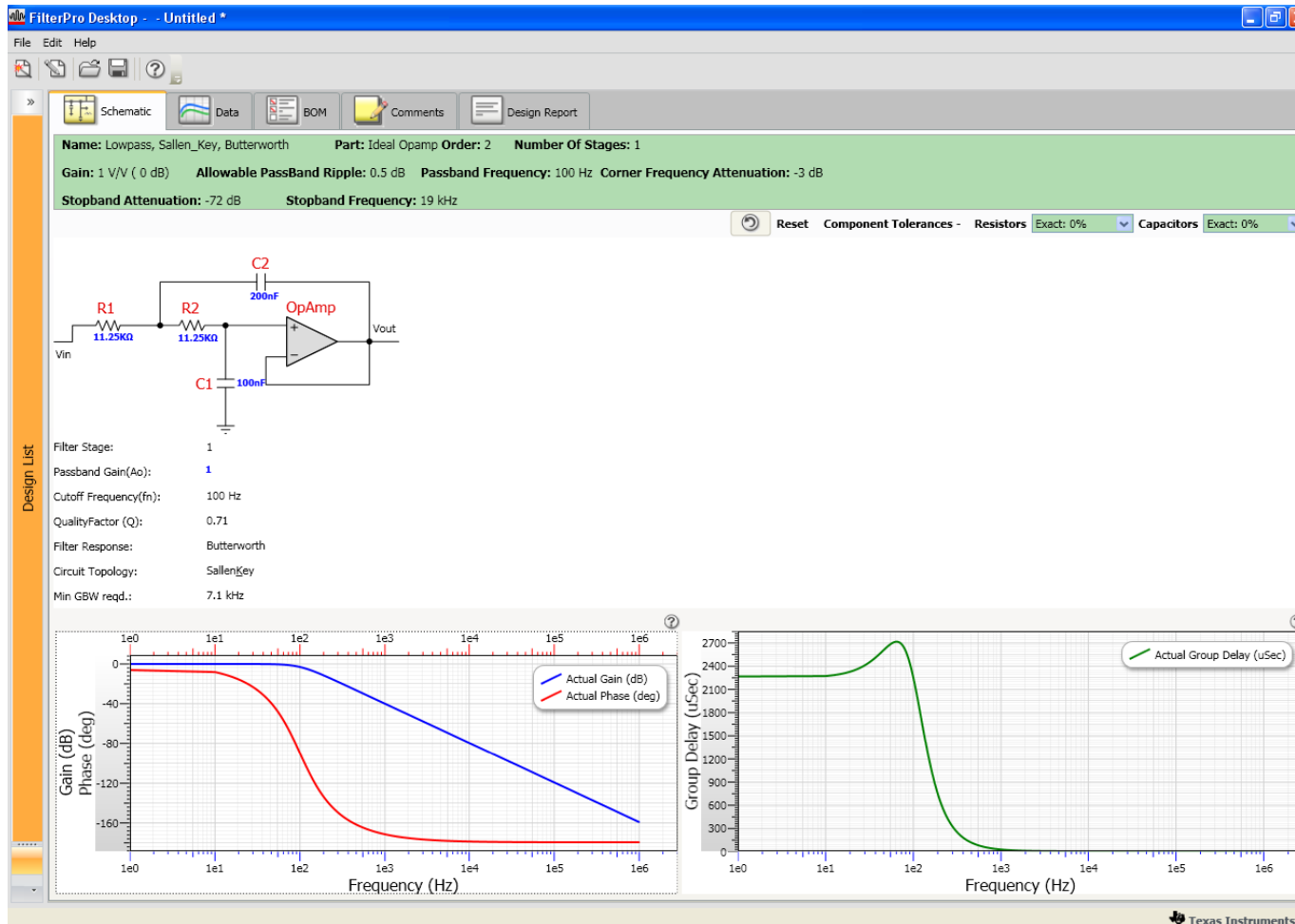
工具和软件 - FilterPro 滤波器设计

- 选择滤波器响应，选择滤波器的拓扑结构



工具和软件 - FilterPro 滤波器设计

- 工具辅助计算出元件值，并推荐所需运放的GBW参数



技术支持

- TI提供全面的产品技术支持，工程师与工程师交流的论坛，是解决问题，答疑解惑的好去处。



- TI的支持与社区网址在www.deyisupport.com，TI工程师会定期解答用户的问题，用户也可在支持社区里搜索到已经解决的问题和相关资料。



- 问题的关键字来搜索，或者在资料库中查找



样片申请

- 当您的设计需要TI样片时，可以进入“样片与购买”免费申请样片。TI将会支持您完成样机设计。

The screenshot displays the Texas Instruments website interface. At the top left is the TI logo and the text 'TEXAS INSTRUMENTS'. A navigation bar contains links for 'Products', 'Applications', 'Tools & Software', 'Support & Community', 'Sample & Buy' (highlighted with a red box), and 'About TI'. To the right of the navigation bar are links for 'Cart', 'English', '简体中文', and '日本語', along with a 'Search' field. Below the navigation bar, there are three main content sections:

- Get Free Samples:** Features an image of a microchip. Below the image is a red-bordered button labeled 'Texas Instruments ICs' with a right-pointing arrow.
- Buy Evaluation Boards, Software & Tools:** Features an image of a green evaluation board. Below the image are two links: 'Order TI Tools from the eStore' and 'Order tools from an Authorized Distributor', both with right-pointing arrows.
- Buy Integrated Circuits:** Features an image of two integrated circuit packages. Below the image is a search input field labeled 'Enter product number' and a red 'Go' button. Below the input field is the text 'Or find authorized distributors for application support or to place an order.' and a 'More' link with a right-pointing arrow.