

Modelithics EXEMPLAR Library For Keysight PathWave Advanced Design System (ADS)

ex · em · plar (n.) Something that serves as a typical example or excellent model.

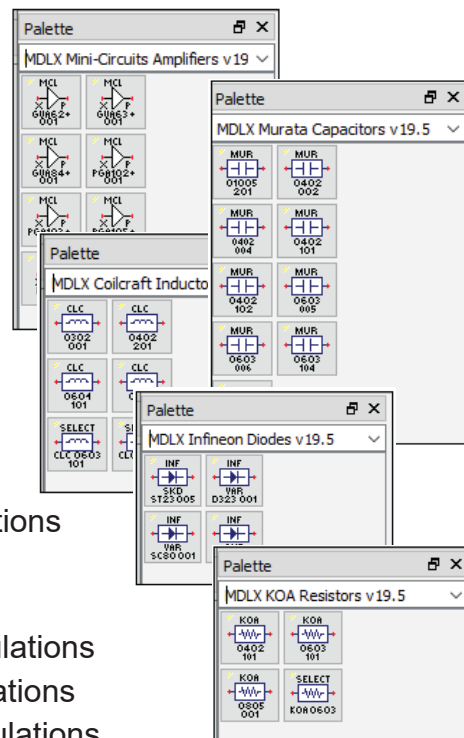
Overview

The Modelithics EXEMPLAR Library is an expanded trial library containing more models than the free SELECT+ Library, which can be downloaded online at www.Modelithics.com/Model/FreeModels. The EXEMPLAR Library is a representative subset (*about 15%*) of all models available in the Modelithics COMPLETE Library, which contains passive CLR component and filter models, non-linear transistor and diode models, the Modelithics SUBSTRATE Library, and more. EXEMPLAR is designed to include all models needed to run the many example tutorial projects available on the Modelithics website.

The EXEMPLAR Library is available to approved customers for a FREE trial and is also available to students and faculty members through the Modelithics University Program for educational wireless electronic design projects. See www.Modelithics.com/Model/Exemplar for more details.

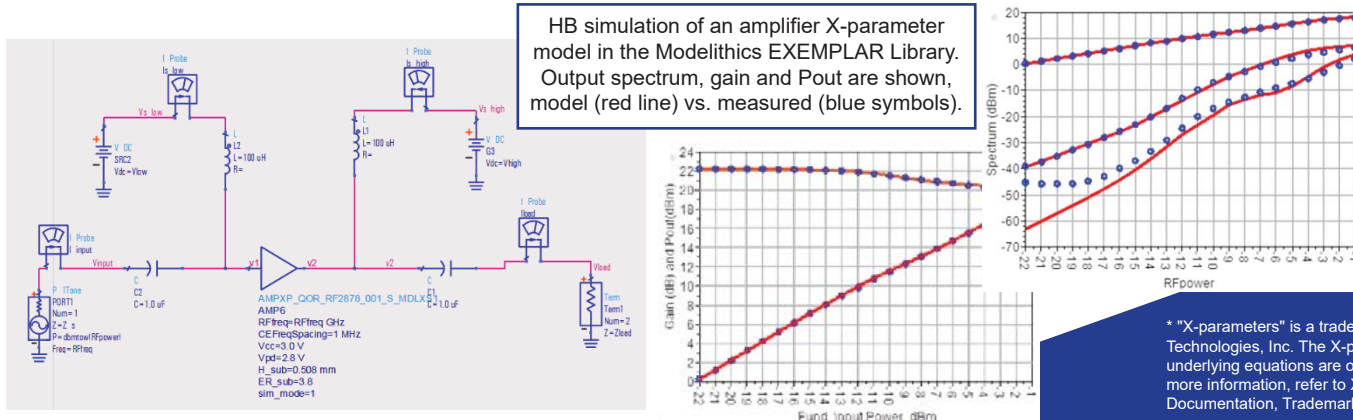
Model and Library Features

- Modelithics models offer scalability by substrate, part value, pad size, temperature, and other characteristics.
- The models are engineered to simulate typical device response including related parasitics.
- The Modelithics EXEMPLAR Library includes many example design projects, and all of the Modelithics models needed to run those projects.
- Modelithics SELECT+ and SUBSTRATE libraries are included in Modelithics EXEMPLAR for convenient access.



Example Projects in Modelithics EXEMPLAR

- Part Value Tuning
- Part Value Optimization
- Substrate Scaling
- Statistical Analysis
- Varying Bias Simulations
- Power Sweep
- Varying Temperature Simulations
- Harmonic Balance
- Noise Parameters
- 1/f Noise
- 2-Tone Intermodulation
- Load Pull Simulations
- Amplifier Model Simulations
- Filter Model Simulations
- Resonator Simulations
- Transformer Simulations



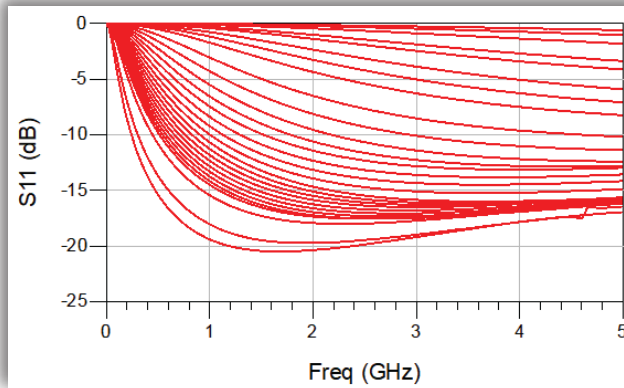
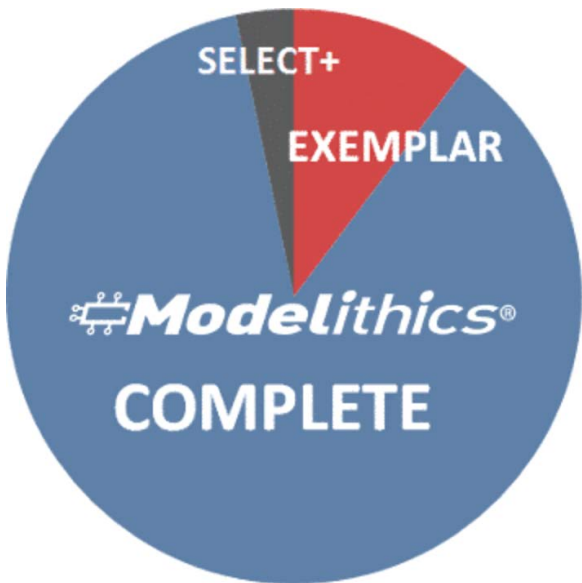
* "X-parameters" is a trademark of Keysight Technologies, Inc. The X-parameters format and underlying equations are open and documented. For more information, refer to X-parameters Open Documentation, Trademark Usage & Partnerships.

Components in the Modelithics EXEMPLAR Library for Keysight PathWave ADS

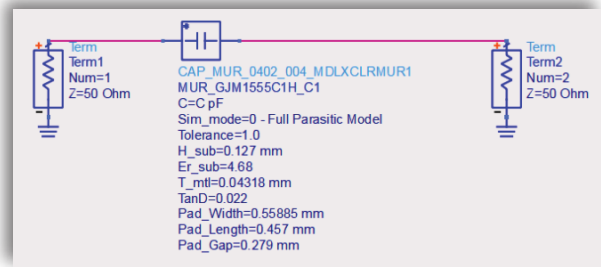
NLT	SLC			NLD
Avago AT-41533, AT-64023	Avago (Amplifier) MGA86576	MACOM (PIN Limiter) MASWSS0204	Freescale (Amplifier) MVE6IC9100NR1	Infineon BAS70, BB535, BBY51-02W
Excelics EFA060BS5	MACOM (Package) 2690-1011	Mini-Circuits (Amplifiers) GVA-62+, GVA-63+, GVA-84+, PGA-102+, PGA-103+, PGA-105+, PHA-1+, PHA-22+	Maxim (Amplifiers) MAX2371, MAX2373	MACOM MLP 7110
Infineon BFP420, BFP949	Vanguard (Transformer) 100205			On Semiconductor MMDB301LT1
MACOM NPTB00004A	Murata (Resonators) DRR030KE1R2, DRM020KER93	Qorvo (Amplifiers) RF511OG, RF2132	Maxim (Mixer) MAX2681	Rohm RB715F
Motorola MRF1570T1	AVX (Coupler) CP0603	Toyo (Filter) HFF-101B	Sawtek (Duplexer) 856331	Skyworks SMV1147-011LF
NXP BFS540	CLR			Microsemi UPP9401
SEDI FLL120MK	AVX (Capacitor) Accu-P (01005, 0402)	Coilcraft (Inductors) 0302CS, 0402CS, 0604HQ, 0805CS	TDK (Inductor) MLG0402Q	<i>More to come! New models are added continually. Visit our website for an updated, complete list, and to see our available Pre-Release models (www.Modelithics.com)</i>
		KOA (Resistors) RK73x1E, RK73x1J, RK73x2A	Toko (Inductor) LL1608-FSL	
	ATC (Capacitors) 100A, 600L, 600F	Passive Plus (Capacitors) 0402N, 0603N	Johanson (Capacitor) R15S	
	Barry (Resistor) RK0603ZZ	Murata (Capacitors) GRM022, GJM15, GRM1555C, GRM155R7, GRM188R71H, GQM188, GRM1885C	Johanson (Inductor) L-05Cxxx	
	KEMET (Capacitors) CBR04, C0805(X7R)		Vishay (Capacitors) HPC0402A, VJ0402D	

SELECT+			
AVX (Capacitors) 600S, Accu-P	Infineon (Schottky Diode) BAS40	Mini-Circuits (Filter) HFCN-2700+	TDK (Inductor) MLG1608B
Barry (Resistor) RE0805CT	Johanson (Capacitor) R07S	Mini-Circuits (Attenuators) RCAT & YAT	Toko (Inductor) LL2012-FHL
Coilcraft (Inductors) 0603CS, 0603HP	KEMET (Capacitor) CBR06	Nitronex (GaN HEMT Package) NPT1012	Würth Elektronik (Inductor) WE-MK
	KOA (Resistor) RK73x1J	NXP (MOSFET) BF1211 & BF1212	RJR (Package) QFN01 LCP
IMS (Attenuator) IMS2533	Murata (Capacitor) GRM2165C2A	Presidio (Capacitor) BB0502X7R104M	Qorvo (Amplifier) RF2878

EXEMPLAR: 71 Models representing 3,382 parts
COMPLETE: >750 Models representing >18,000 parts



Discrete part value sweep using a Modelithics capacitor model of the Murata GJM1555C family from 0.1 to 20 pF



To request a **FREE** Trial, contact Modelithics at sales@modelithics.com or visit www.Modelithics.com