



# Enabling the Internet of Things

Solutions for a Connected World

## Leveraging Wireless Technology

---

Skyworks' broad portfolio offers many choices for engineers and developers working on products and systems for the Internet of Things (IoT). Our solutions leverage multiple wireless technologies making them suitable for a wide range of applications requiring different frequency ranges, data rates and battery life.



# Featured Markets

---

## The Journey to Smarter, Faster, Seamless Connectivity Starts Here!

Connectivity has expanded far beyond smartphones and person-to-person communications to now encompass device-to-device networks in smart homes, industrial IoT, autonomous transport and other diverse applications. Our market-leading solutions are providing the foundation for this vibrant ecosystem, resolving the daunting analog and RF complexities that challenge the capabilities of existing hardware and networks.



### Automotive

Our innovative portfolio takes seamless connectivity in today's cars to the next level – making the driving experience increasingly smarter and safer. By leveraging our leadership and expertise in wireless to deliver cutting edge communication technologies such as 5G NR for cellular, vehicle-to-vehicle (V2V) communication and 802.11ax Wi-Fi to new vehicles, we can help you elevate the driver experience.



### Connected Home

Our products allow homeowners greater control over their environment with a host of connected devices including thermostats, security systems, touch pads, security sensors, light switches, smoke and CO alarms, major appliances, and door locks. Our wireless solutions, from Wi-Fi (802.11) to Zigbee®, Thread and Bluetooth® (including low energy), deliver advanced short and long range connectivity – making the connected home that much smarter.



### Industrial

With global market demand for industrial semiconductors accelerating, Skyworks is well positioned to deliver viable options that leverage LoRa® and SigFox wireless standards as well as meet a wide-range of frequency, data rate and battery performance requirements. Our products support smart cities, factory automation, building controls, asset tracking, smart metering, LED lighting, security cameras and smart agriculture functions.



### Machine-to-Machine (M2M)

Innovations from Skyworks have the power to transform the way organizations do business. From manufacturing automation to telemetry, remote control devices and asset management, Skyworks offers a diverse portfolio of cellular, short-range, and global positioning solutions.



### Medical

At Skyworks, we are advancing medical devices and the sharing of information that is improving the care of millions of people worldwide. Skyworks integrates cutting-edge technologies into product designs that facilitate the miniaturization of medical instruments and enhance data transmission. Further, many of our amplifiers, diodes, optoelectronic solutions and dielectric materials serve as key components in the healthcare industry.



### Mobile Devices

Consumers want fast, seamless mobile connectivity – anywhere, anytime. Our 5G leadership, technology expertise, global scale and quality allow us to create highly-integrated, cost-efficient solutions that meet the size, energy and performance constraints of smartphones, tablets, WLANs and other emerging applications.



### Smart Energy

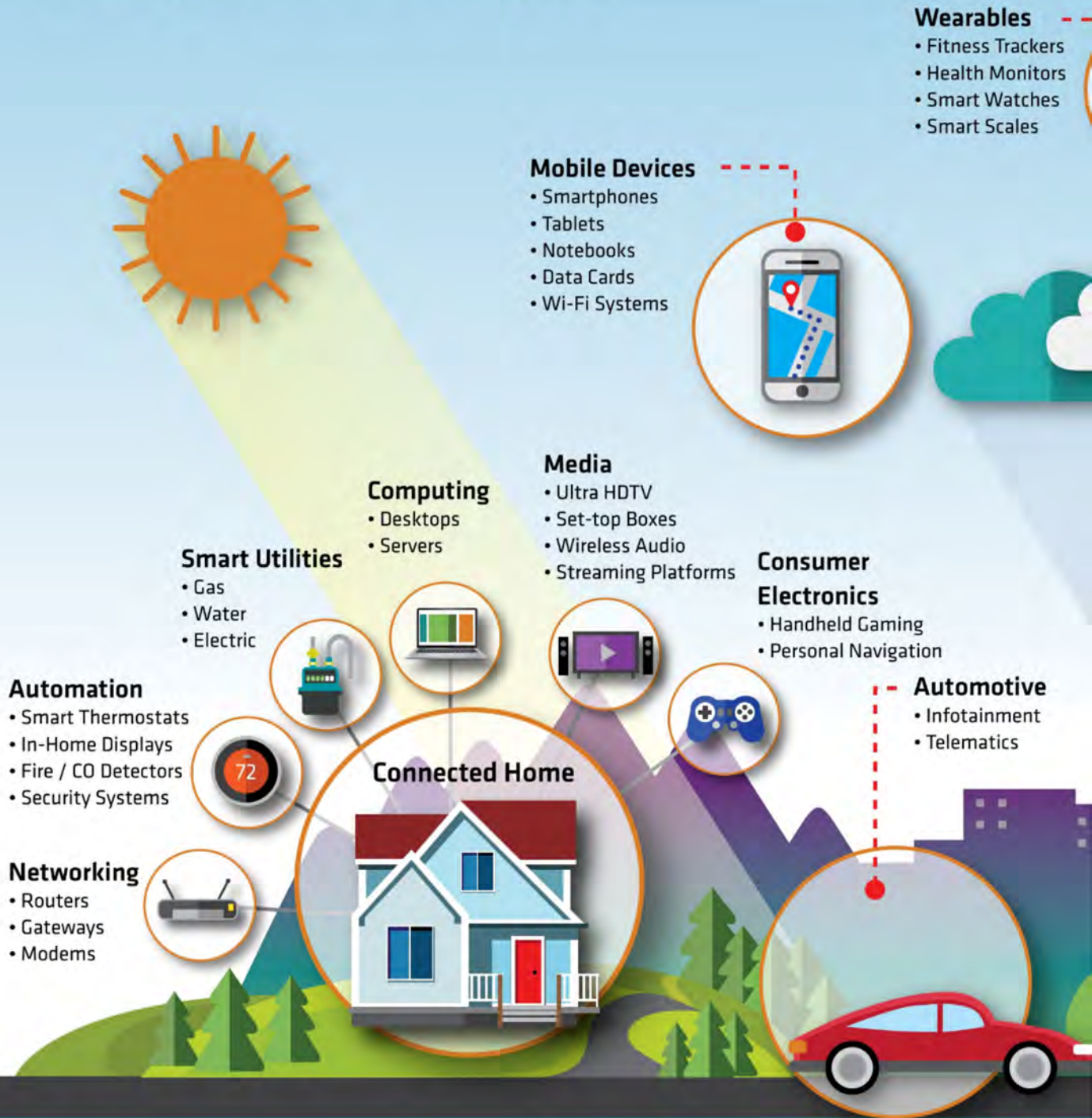
Utility company initiatives to modernize their infrastructure with remote control and automation is made possible by two-way communication enabled in part by Skyworks. Our devices support smart meters, smart thermostats, in-home displays, Zigbee® / 802.15.4, Bluetooth® and Bluetooth® low energy applications that help optimize energy efficiency.



### Wearables

When it comes to today's sleek wearables – from smartwatches to smart eyewear, fitness trackers and health monitors – Skyworks offers superior, small form factor solutions that consume minimal power and enable always on connectivity, allowing applications to run in the background for lengthy periods of time without a battery recharge.

# Enabling the Internet of Things (IoT)





**Wireless Infrastructure**

- Macro Cell:
  - FDD/TDD Remote Radio Head
  - FDD/TDD Tower Mount Amplifier (RX)
  - Repeaters
- Small Cells

**Medical**

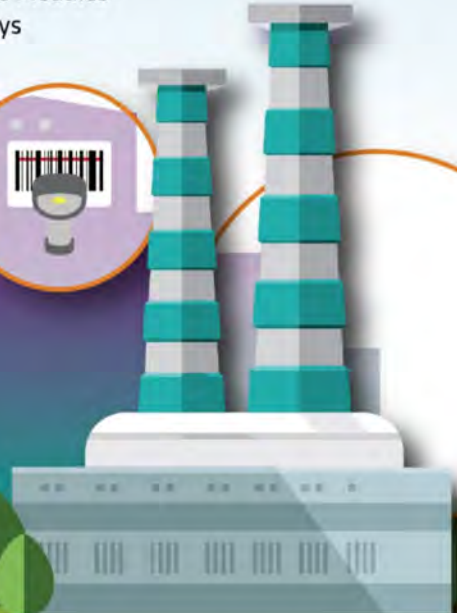
- Heart Monitors
- Patient Telemetry
- Defibrillators

**Machine-to-Machine**

- Asset Management
- Wireless Modules
- Gateways

**Industrial**

- Smart City
- GPS Tracking
- Building Controls
- Smart Agriculture
- Intelligent/Connected Lighting



# New and Featured IoT Products by Market

## The Right Design Choice Starts Here

Specification tables for products in this brochure are provided on the following pages.

**New** products (purple, bold) are continually being introduced at Skyworks. For up-to-date information on products in development, please contact your local Skyworks sales representative.

**Coming Soon** products (blue, bold) indicate devices that will be available soon for purchase.



Description		Automotive	Connected Home	Industrial	Machine-to-Machine	Medical	Mobile Devices	Smart Energy	Wearables
<b>Amplifiers</b>									
SKY77368-11	Power Amplifier Module for Quad-band GSM / GPRS / EDGE / TD-SCDMA / TDD LTE / HD-FDD LTE				<b></b>		<b></b>		
SKY77733-11	SkyHi™ Power Amplifier Module for LTE				<b></b>		<b></b>		
SKY77762-81	PAM for CDMA / WCDMA / HSDPA / HSUPA / HSPA+ / LTE – Band 2								<b></b>
SKY77638-11	SkyLITE™ Multimode Multiband Power Amplifier Module				<b></b>		<b></b>		
SKY77680-11	Multimode Multiband Power Amplifier Module for Dual Mode / Quad-band GSM/ EDGE and WCDMA / HSDPA / HSUPA / HSPA+ / LTE Band 40/41 HPUE				<b></b>		<b></b>		
SKY77661-11	MMMB PAM for for Dual Mode Quad-band GSM / EDGE – WCDMA / HSDPA / HSUPA / HSPA+ / LTE				<b></b>		<b></b>		
SKY77757-11	SkyLITE™ Multimode Multiband Power Amplifier Module				<b></b>		<b></b>		
SKY77769-11	Multimode Multiband Power Amplifier Module for Penta-band WCDMA / HSDPA / HSUPA / HSPA+ / LTE				<b></b>		<b></b>		
SKY85204-11	2.4 GHz, 802.11ac Switch / LNA Front End								<b></b>
SE2433T	2.4 GHz Zigbee® / 802.15.4 Power Amplifier								<b></b>
SKY65623-682LF	GPS / GLONASS / Galileo / Compass LNA				<b></b>		<b></b>		<b></b>
<b>Front-end Modules</b>									
SKY68000-31	LTE Dual-band FEM				<b></b>				<b></b>
SKY68001-31	LTE Universal Multiband FEM				<b></b>				<b></b>
SKY68020-11	LTE Universal Multiband FEM				<b></b>				<b></b>
SKY66430-11	5G Massive IoT System-in-Package				<b></b>				<b></b>
SE2435L	860 to 930 MHz High Power RF FEM								<b></b>
SKY65364-21	900 MHz Transmit / Receive High Power FEM								<b></b>
SKY65366-21	400 MHz Transmit / Receive FEM								<b></b>
SKY65367-11	169 to 170 MHz Transmit / Receive FEM								<b></b>
SKY65378-11	860 to 930 MHz RF FEM								<b></b>



Description		Automotive	Connected Home	Industrial	Machine-to-Machine	Medical	Mobile Devices	Smart Energy	Wearables
<b>Front-end Modules</b>									
SKY66100-11	Low Power 169 to 170 MHz Transmit / Receive FEM								
SKY66101-11	902 to 928 MHz High Power RF FEM								
SKY66105-11	902 to 931 MHz High Power RF FEM								
SKY66109-11	2.4 GHz Zigbee® / Smart Energy FEM								
SKY66111 / 112	Low-Power Bluetooth® Low Energy / FEM								
SKY66113 / 114	2.4 GHz Bluetooth® Low Energy / 802.15.4 / Thread / Zigbee® FEM								
SKY66118-11	2.4 GHz Bluetooth® Low Energy FEM								
SKY66119-11	460 MHz Transmit / Receive FEM								
SKY66121-11	169 to 170 MHz Transmit / Receive FEM								
SKY66403 / 404 / 405	2.4 GHz Front-end Module for Zigbee® / Thread / Bluetooth® Applications								
SKY66407-11	2.4 GHz Low Power, Low Profile FEM for Bluetooth® IoT Applications								
SKY66420 / 421 / 422 / 423	860 to 930 MHz RF FEMs								
SKY65383-11	2400 to 2483 MHz Transmit / Receive FEM								
SKY65724-11	Low Noise Amplifier Front-end Module with BDS / GPS / GNSS Pre-filter								
SKY65933 / 943	GNSS LNA FEM with Integrated Pre- and Post-filter								
<b>Switches</b>									
SKYA21003	AEC-Q100 Qualified 20 MHz to 3.0 GHz SPDT Switch								
SKY13374-397LF	Wi-Fi 802.11a/b/g/n 300 kHz to 6.0 GHz SPDT Switch								
SKY13453-385LF	0.01 to 6.0 GHz Single Control SP2T (SPDT) Switch								
SKY13489-001	0.7 to 2.7 GHz SPDT High Power Switch (Single Bit Control)								
SKY13522-644LF	0.7 to 3.0 GHz High Isolation (Single Bit Control) SPDT Switch								
SKY13587-378LF	20 MHz to 6 GHz GaAs SPDT Switch								
SKY13582-676LF	0.4 to 3.8 GHz SP3T Switch								
SKY13586-678LF	2.4 to 2.5 GHz SP3T Switch								
SKY13560-485LF	0.4 to 2.7 GHz SP4T LTE Transmit / Receive Switch								
SKY13626-685LF	0.4 to 3.8 GHz SP4T Switch								
SKY13567-666LF	0.7 to 2.7 GHz SP5T Switch								
SKY13636-695LF	0.7 to 3.8 GHz SP6T LTE Transmit / Receive Switch with MIPI®								
SKY13637-695LF	0.7 to 3.8 GHz SP8T LTE Transmit / Receive Switch with MIPI®								
SKY13638-700LF	0.4 to 3.8 GHz SP10T LTE Transmit / Receive Switch with MIPI®								

# Product Specifications

Specification tables for products in this brochure are provided on the following pages. For the latest information, please visit the New Products section of our website at [www.skyworksinc.com](http://www.skyworksinc.com).

## Amplifiers

### Cellular

#### LTE PAs

Part Number	Frequency (MHz)	Description	Typical PAE (%)	Typical Gain (dB)	Typical Linear LTE Power (dBm)	Supply Voltage (V)	Package (mm)
SKY77368-11	663-915 1710-1920 2010-2025	Power Amplifier Module for Quad-band GSM / GPRS / EDGE / TD-SCDMA / TDD LTE / HD-FDD LTE	–	–	–	–	12-pad MCM 3 x 3 x 0.67
SKY77733-11	777–798	SkyHi™ Power Amplifier Module for LTE	43	32	–	3.0–4.5	10-pad MCM 3 x 3 x 0.9
SKY77762-81	1850–1910	PAM for CDMA / WCDMA / HSDPA / HSUPA / HSPA+ / LTE – Band 2	46	28	–	3.4–4.5	10-pad MCM 3 x 3 x 0.9

#### Multimode Multiband (MMMB) PAs

Part Number	Frequency (MHz)	Description	Typical PAE LTE (%)	Typical I <sub>MAX</sub> (mA)	Typical Gain (dB)	Supply Voltage (V)	Package (mm)
SKY77638-11	Low, Mid and High Bands	SkyLITE™ Multimode Multiband Power Amplifier Module	–	–	–	–	42-pad MCM 4 x 6.8 x 0.71
SKY77680-11	Low, Mid, High and 2G Bands	Multimode Multiband Power Amplifier Module for Dual Mode / Quad-band GSM / EDGE and WCDMA / HSDPA / HSUPA / HSPA+ / LTE Band 40/41 HPUE	–	–	–	–	48-pad MCM 7.4 x 4.4 x 0.75
SKY77661-11	Low, Mid, and High Bands	MMMB PAM for for Dual Mode Quad-band GSM / EDGE – WCDMA / HSDPA / HSUPA / HSPA+ / LTE (Bands 1, 3, 4, 7, 8, 12, 13, 20, 25, 26, 28, 30, 38, 34/39, 40, 41)	–	–	–	–	44-pad MCM 7 x 4 x 0.8
SKY77757-11	Low and Mid Bands	SkyLITE™ Multimode Multiband Power Amplifier Module	–	–	–	–	42-pad MCM 4 x 6.8 x 0.71
SKY77769-11	699–915 1710–1910	Multimode Multiband PAM for Penta-Band (1, 2, 4, 5, 8) WCDMA / HSDPA / HSUPA / HSPA+ / LTE Bands 1, 2, 4, 5, 8, 26, 27, 34, 39	–	–	–	–	14-pad MCM 3 x 4.2 x 0.9

### Wi-Fi Connectivity

#### 2.5 GHz Low Noise Amplifiers

Part Number	Frequency Range (GHz)	Typ. Gain (dB)	V <sub>cc</sub> (V)	Typ. Noise Figure (dB)	Package (mm)
SKY85204-11	2.4–2.5	13	3.3	2	11-bump Flip Chip Die 0.76 x 0.97

### Smart Energy, Connected Home and Automation 802.15.4, ISM, Thread and Zigbee®

Part Number	Frequency Range (GHz)	Test Frequency (GHz)	Typ. Gain (dB)	OIP3 (dBm)	IP <sub>1dB</sub> (dBm)	PAE (%)	V <sub>cc</sub> (V)	Typ. Quiescent Current (mA)	Typ. Noise Figure (dB)	Package (mm)
SE2433T	2.4–2.5	2.45	22	–	24	31	2.0–3.6	30	–	12-pin QFN 2 x 2.5 x 0.55



# Product Specifications

## Amplifiers

### BDS / GPS / GNSS Low Noise Amplifiers

Part Number	Frequency Range (MHz)	Test Frequency (MHz)	Description	Gain (dB)	V <sub>DD</sub> (V)	IP <sub>1dB</sub> (dBm)	Noise Figure (dB)	Package (mm)
SKY65605-21	1559–1606	–	BDS / GPS / GNSS Low Noise Amplifier	19	1.5–2.85	14.5	0.6	6-pin QFN 0.7 x 1.1 x 0.55
SKY65623-682LF	1559–1660	–	GPS / GLONASS / Galileo / Compass Low Noise Amplifier	16.5	1.5–3.6	-30	0.85	5-pin QFN 0.8 x 0.8 x 0.32

## Front-end Solutions

### Cellular

#### LTE Front-end Modules

Part Number	Frequency (MHz)	Description	Typical Linear LTE Power (dBm)	Supply Voltage (V)	Package (mm)
SKY68000-31	777–787 1710–1755	LTE Dual-band Front-end Module for IoT	23.5	2.85–4.5	24-pad MCM 4 x 5 x 0.9
SKY68001-31	699–915 1710–1910	LTE Universal Multiband Front-end Module for IoT	23.5	2.85–4.5	24-pad MCM 4 x 5 x 0.9
SKY68020-11	663–915 1695–1980	LTE Universal Multiband Front-end Module for IoT	23.5	2.85–4.5	24-pad MCM 4 x 5 x 0.9

#### System-in-Package

Part Number	Frequency (MHz)	Description	Typical Linear LTE Power (dBm)	Supply Voltage (V)	Package (mm)
SKY66430-11	700–2200	5G Massive IoT System-in-Package	23	3.1–5.5	320-pin BGA 8.8 x 10.8 x 0.95

### Smart Energy, Connected Home and Automation 802.15.4, ISM, Thread and Zigbee®

Part Number	RF Frequency (MHz)	Typ. Rx Insertion Loss (dB)	Typ. Rx Gain (dB)	Tx I <sub>CC</sub> (mA)	Tx Gain (dB)	Typ. Saturated Output Power (dBm)	Supply Voltage (V)	Package (mm)
SE2435L	860–930	2	16	–	28	28	2.0–4.5	24-pin QFN 4 x 4 x 0.9
SKY65364-21	890–960	0.5	15	–	22	30	3.0–3.8	28-pin MCM 6 x 6 x 0.9
SKY65366-21	400–500	0.4	21	–	22	30.2	3.0–4.0	28-pin MCM 6 x 6 x 0.9
SKY65367-11	169–170	0.7	-0.7	–	35	30	3.3	16-pin MCM 4 x 4 x 0.9
SKY65378-11	860–930	-1.5	17	–	-1.5	N/A	2.0–4.8	24-pin QFN 4 x 4 x 0.9
SKY66100-11	169–170	0.4	-0.5	–	30	24	2.0–3.6	16-pin MCM 4 x 4 x 0.9
SKY66101-11	902–928	–	16	–	33	30	2.0–4.8	36-pin MCM 6 x 6 x 0.9
SKY66105-11	900–930	0.7	–	–	29	29.5	2.0–4.8	12-pin MCM 6 x 8 x 1.05

# Product Specifications

## Front-end Solutions

Smart Energy, Connected Home and Automation 802.15.4, ISM, Thread and Zigbee®

Part Number	RF Frequency (MHz)	Typ. Rx Insertion Loss (dB)	Typ. Rx Gain (dB)	Tx I <sub>sat</sub> (mA)	Tx Gain (dB)	Typ. Saturated Output Power (dBm)	Supply Voltage (V)	Package (mm)
SKY66109-11	2400–2483	–	11.5	–	22	21	2.0–3.6	20-pin MCM 3 x 4 x 0.9
SKY66111-11	2400–2485	0.5	-0.5	–	10	10	3	20-pin MCM 3.3 x 3.0 x 0.8
SKY66112-11	2400–2500	2	11	–	22	–	1.2–3.6	22-pin MCM 3.5 x 3.0 x 0.9
SKY66113-11	2400–2500	2	12	–	22	22	1.2–3.6	16-pin MCM 2.4 x 2.4 x 0.7
SKY66114-11	2400–2483	2	12	–	24	22	1.8–3.6	16-pin MCM 2.4 x 2.4 x 0.8
SKY66118-11	2400–2500	1.3	-1.3	–	20	20	1.7–3.3	18-pin MCM 2.6 x 2.4 x 0.75
SKY66119-11	450–470	–	15.5	–	25	30.5	3.6	28-pin MCM 6 x 6 x 1.05
SKY66121-11	169–170	0.9	–	–	–	31	2.0–4.0	16-pin MCM 4 x 4 x 0.76
SKY66403-11	2400–2500	2	11	–	22	22	1.7–3.6	22-pin MCM 3.3 x 3.0 x 1.0
SKY66404-11	2400–2500	–	–	–	–	–	1.7–3.6	22-pin MCM 3.5 x 3.0 x 0.82
SKY66405-11	2400–2500	2	12	–	10	10	1.8–3.6	22-pin MCM 1.9 x 1.9 x 0.48
SKY66407-11	2400–2500	1.1	-1.1	–	10	10	1.7–3.6	9-pin CSP 1.2 x 1.2 x 0.35
SKY66420-11	860–930	1.5	18	–	16	27	2.0–4.8	16-pin MCM 3 x 3 x 0.75
SKY66421-11	860–930	0.6	-0.6	–	16	27	2.0–4.8	16-pin MCM 3 x 3 x 0.75
SKY66422-11	860–930	–	–	–	–	–	2.5–3.6	16-pin MCM 3 x 3 x 0.75
SKY66423-11	860–930	1.5	18	–	29	27	2.0–4.8	16-pin MCM 3 x 3 x 0.75
SKY65383-11	2400–2483	–	12	–	34	30	3.0–4.0	28-pin MCM 6 x 6 x 0.85

## BDS / GPS / GNSS Front-end Modules

Part Number	Frequency Range (MHz)	Test Frequency (MHz)	Description	Gain (dB)	V <sub>DD</sub> (V)	IP <sub>1dB</sub> (dBm)	NF (dB)	Package (mm)
SKY65724-11	1559–1606	1575	Low Noise Amplifier Front-end Module with BDS / GPS / GNSS Pre-filter	16	–	–	1.8	8-pin MCM 1.1 x 1.5
SKY65933-11	1559–1606	1575	GNSS LNA Front-end Module with Integrated Pre- and Post-filters	14.5	1.50–2.85	-13	1.9	16-pin MCM 2.5 x 2.5 x 0.7
SKY65943-11	1559–1606	1575	GNSS Low Noise Amplifier Front-end Module with Integrated Pre- and Post-filter, External Input Match	15	1.62–3.3	-9	2.0	10-pin MCM 2.5 x 2.5 x 0.65

# Product Specifications

## Switches

### SPDT (SP2T) RF Switches

Part Number	Description (Absorptive/ Reflective)	Frequency (GHz)	Typ. IL (dB)	Typ. Isol. (dB)	Typ. IIP3 (dBm)	Typ. IP <sub>1dB</sub> (dBm)	Package (mm)
SKYA21003*	SPDT (R)	0.1–6.0	0.3–0.35	40–42	70	38.5	12-pin QFN 2 x 2 x 0.55
SKY13374-397LF	SPDT (R)	0.03–6.0	0.35–0.8	22–34	68	39	12-pin QFN 2 x 2 x 0.55
SKY13453-385LF	SPDT (R)	0.01–6.0	0.4–0.7	27–15	57	33	6-pin QFN 1 x 1 x 0.45
SKY13489-001	SPDT (R)	0.7–2.7	0.25	32	IMD3, -120	39	6-bump WLCSF 0.7 x 1.1 x 0.41
SKY13522-644LF	SPDT (R)	0.7–3.0	0.6	53	57	32	8-pin QFN 1.1 x 1.1 x 0.45
SKY13587-378LF	SPDT (R)	0.02–6.0	–	–	–	–	6-pin MLPD 1 x 1 x 0.5

\*This product is AEC-Q100 qualified.

### SP3T RF Switches

Part Number	Description (Absorptive/ Reflective)	Frequency (GHz)	Typ. IL (dB)	Typ. Isol. (dB)	Typ. IIP3 (dBm)	Typ. IP <sub>1dB</sub> (dBm)	Package (mm)
SKY13852-676LF	SP3T (R)	0.4–3.8	–	–	–	–	9-pin QFN 1.1 x 1.1 x 0.5
SKY13582-676LF	SP3T (R)	0.4–3.8	–	25 @ 2.7 GHz	–	–	9-pin QFN 1.1 x 1.1 x 0.5
SKY13586-678LF	SP3T (R)	2.4–2.5	0.75	35	46	29	8-pin MLPD 1.1 x 1.1 x 0.33

### SP4T RF Switches

Part Number	Description (Absorptive/ Reflective)	Frequency (GHz)	Typ. IL (dB)	Typ. Isol. (dB)	Typ. IIP3 (dBm)	Typ. IP <sub>1dB</sub> (dBm)	Package (mm)
SKY13560-485LF	SP4T (R)	0.4–2.7	0.4–0.7	23–34	–	–	14-pin QFN 2 x 2 x 0.55
SKY13626-685LF	SP4T	0.7–3.8	–	–	–	–	12-pin QFN 1.1 x 1.1 x 0.5

### High Throw Count (>4T) Switches / Antenna Switch Modules (ASMs) (GPIO and MIPI® RFFE)

#### High Throw Count Switches

(Band Distribution, Linear Tx / Rx, Rx Diversity, General Purpose Signal Routing)

Part Number	Description (Absorptive/ Reflective)	Frequency (GHz)	Typ. IL (dB)	Typ. Isol. (dB)	Typ. IIP3 (dBm)	Typ. IP <sub>1dB</sub> (dBm)	Package (mm)
SKY13567-666LF	SP5T (R)	0.7–2.7	0.3–0.6	30–38	61	–	12-pin QFN 1.9 x 1.1 x 0.55
SKY13636-695LF	SP6T (R)	0.7–3.8	0.55 @ 2.7 GHz	24 @ 2.7 GHz	68	37	14-pin QFN 2 x 2 x 0.55
SKY13637-695LF	SP8T (R)	0.7–3.8	25 @ 2.7 GHz	0.59 @ 2.7 GHz	68	38	14-pin QFN 2 x 2 x 0.55
SKY13638-700LF	SP10T (R)	0.7–3.8	0.75 @ 2.7 GHz	30 @ 2.7 GHz	69	38	20-pin QFN 2.4 x 2.4 x 0.5



- Sales Offices
- ◆ Design Centers
- ★ Manufacturing

Copyright © 2014, 2015, 2016, 2017, 2018, 2019, 2020 Skyworks Solutions, Inc. All Rights Reserved.

Information in this document is provided in connection with Skyworks Solutions, Inc. ("Skyworks") products or services. These materials, including the information contained herein, are provided by Skyworks as a service to its customers and may be used for informational purposes only by the customer. Skyworks assumes no responsibility for errors or omissions in these materials or the information contained herein. Skyworks may change its documentation, products, services, specifications or product descriptions at any time, without notice. Skyworks makes no commitment to update the materials or information and shall have no responsibility whatsoever for conflicts, incompatibilities, or other difficulties arising from any future changes.

No license, whether express, implied, by estoppel or otherwise, is granted to any intellectual property rights by this document. Skyworks assumes no liability for any materials, products or information provided hereunder, including the sale, distribution, reproduction or use of Skyworks products, information or materials, except as may be provided in Skyworks Terms and Conditions of Sale.

THE MATERIALS, PRODUCTS AND INFORMATION ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, WHETHER EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE, INCLUDING FITNESS FOR A PARTICULAR PURPOSE OR USE, MERCHANTABILITY, PERFORMANCE, QUALITY OR NON-INFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHT; ALL SUCH WARRANTIES ARE HEREBY EXPRESSLY DISCLAIMED. SKYWORKS DOES NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE INFORMATION, TEXT, GRAPHICS OR OTHER ITEMS CONTAINED WITHIN THESE MATERIALS. SKYWORKS SHALL

NOT BE LIABLE FOR ANY DAMAGES, INCLUDING BUT NOT LIMITED TO ANY SPECIAL, INDIRECT, INCIDENTAL, STATUTORY, OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR LOST PROFITS THAT MAY RESULT FROM THE USE OF THE MATERIALS OR INFORMATION, WHETHER OR NOT THE RECIPIENT OF MATERIALS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Skyworks products are not intended for use in medical, lifesaving or life-sustaining applications, or other equipment in which the failure of the Skyworks products could lead to personal injury, death, physical or environmental damage. Skyworks customers using or selling Skyworks products for use in such applications do so at their own risk and agree to fully indemnify Skyworks for any damages resulting from such improper use or sale.

Customers are responsible for their products and applications using Skyworks products, which may deviate from published specifications as a result of design defects, errors, or operation of products outside of published parameters or design specifications. Customers should include design and operating safeguards to minimize these and other risks. Skyworks assumes no liability for applications assistance, customer product design, or damage to any equipment resulting from the use of Skyworks products outside of stated published specifications or parameters.

Skyworks, the Skyworks symbol, SkyHi, SkyLITE, and Skyworks Green are trademarks or registered trademarks of Skyworks Solutions, Inc., in the United States and other countries. Third-party brands and names are for identification purposes only, and are the property of their respective owners. Additional information, including relevant terms and conditions, posted at [www.skyworksinc.com](http://www.skyworksinc.com), are incorporated by reference.

**For more information, please visit our website at [www.skyworksinc.com](http://www.skyworksinc.com).**



Skyworks Solutions, Inc. | Nasdaq: SWKS | [sales@skyworksinc.com](mailto:sales@skyworksinc.com)

USA: 781-376-3000 | Asia: 886-2-2735 0399 | Europe: 33(0)1 43548540 | BR0418-20A 1/20 | [in](#) [f](#) [t](#) [v](#)