

ON Semiconductor®



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*Selection. Service. Support.*

# Analog Fast Facts

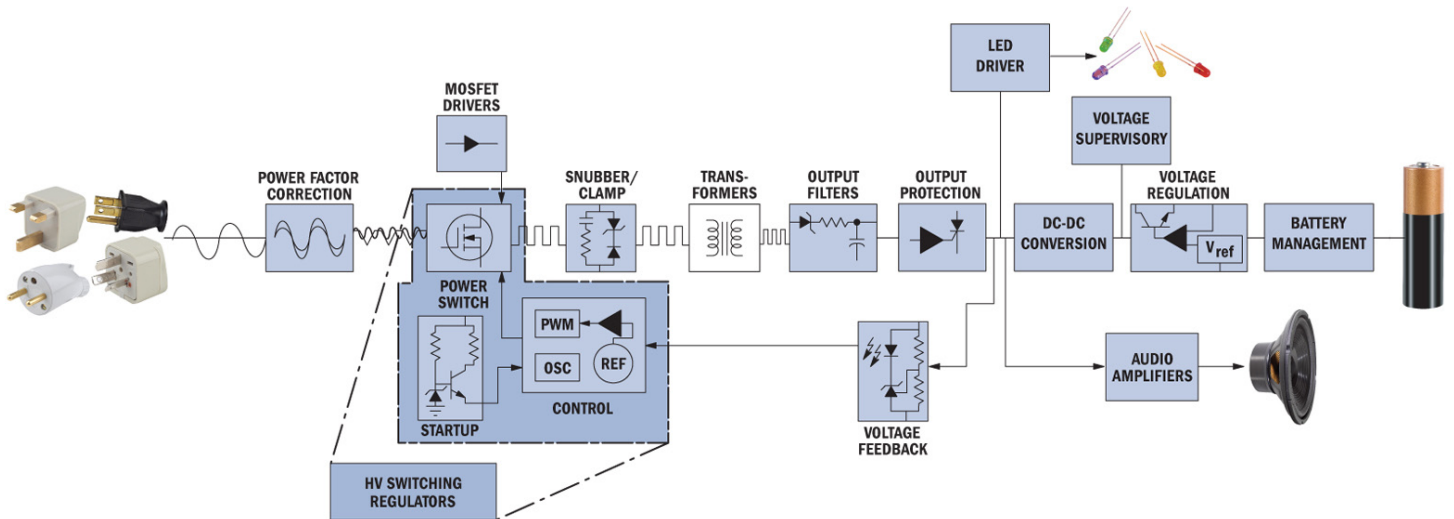


*Analog Solutions from ON Semiconductor extend throughout a multitude of industries and applications - From the Socket to the Pocket™. Our devices include Power Management ICs, Signal Conditioning and Interface ICs, High-Speed Op Amps, Clock Management, and Standard and High Performance Logic. This "Fast Facts" brochure will provide you with a summary of our full range of products.*

**Selection. Service. Support.**

# Power Management

**The Power Management Chain – From the Socket to the Pocket™, and everything in between...**



## AC-DC Offline Switching Controllers/Regulators

### Power Factor Correction Controllers

Single Stage Flyback, Continuous Conduction Mode (CCM)	NCP1651
Boost Pre-Regulator, CCM	NCP1650
Follower Boost Pre-Regulator, CCM	NCP1653
Boost Pre-Regulator, Critical or Boundary Conduction Mode (BCM)	MC33262, MC34262, MC33368
Follower Boost Pre-Regulator, BCM	MC33260
Boost Pre-Regulator, BCM or Discontinuous Conduction Mode (DCM)	NCP1601
Combo PFC+PWM, DCM or BCM	NCP1603

### Flyback, High-Voltage Power Switching Regulators with Integrated Switch

Internally Fixed Frequency PWM, without Dynamic Self Supply (DSS)	NCP1000, NCP1001, NCP1002
Current Mode Fixed Frequency PWM with DSS	NCP1010, NCP1011, NCP1012, NCP1013, NCP1014, NCP1027

### Flyback, External Switch, Fixed Frequency

with Dynamic Self Supply	NCP1201, NCP1216
without Dynamic Self Supply	NCP1203, NCP1217, NCP1239F, NCP1212, NCP1230

### Flyback, External Switch, Variable Frequency, Quasi-Resonant Controllers

with Dynamic Self Supply	NCP1207A, NCP1308, NCP1337
without Dynamic Self Supply	NCP1205, NCP1377/B, NCP1378, NCP1381

### Forward, External Switch

External Startup	NCP1212
500-700 V, Integrated Startup	NCP1216A, NCP1217A, NCP1280, NCP1239V

### Secondary Side Controllers

Quasi-Resonant Switch Mode Power Supplies	NCP4326, NCP4330
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## DC-DC Converters

### Isolated Topologies

Flyback/Forward	MC33023, MC34023, CS51221, CS51021A/2A, CS5124
Flyback	NCP1030/1
Push-Pull	MC33025, MC34025

### Non-Isolated Topologies

Buck (Step Down)	CS5211, NCP1580, NCV8800, NCP1595, NCP5422, NCP5425, CS51031, CS51033, CS51411/2/3/4, MC33166/7, MC34166/7, LM2574/5/6, NCP1575
Boost (Step Up)	CS5171, CS5173, CS5172, CS5174, CS5112
Multi Topology (Step-Up, Down, or Inverting)	MC33063A, MC34063A, NCV33063A, MC33163, MC34163, NCV33163
Micro-Power, Low Voltage Buck (Step Down)	NCP1530, NCP1501, NCP1550
Micro-Power, Low Voltage Boost (Step Up)	NCP1400A, NCP1402, NCP1403, NCP1406, NCP1410, NCP1411, NCP1422, NCP1421, NCP1450, NCP1423
Charge Pump Converters	MAX1720, NCP1729, MAX828, MAX829

## DC-DC Switching for Computing

Single Phase with DAC	CS5157H, MC33470, NCP5331
Gate Drivers	NCP5351, NCP5355, NCP3418B
CPU Multi-Phase Controllers	NCP5318, NCP5381, NCP5371, NCP5314
DDR Controller	NCP5214

## Drivers

Dedicated Drivers	CS41xx, UAA2xx
Display/LED Drivers	NCP5005/6/7/8, NCP1406, NCP5603, NCP1521/2
Load/Relay Drivers	NCV7xx, MDC3xx, NUD3xx, NCP54xx
MOSFET/IGBT Drivers	MC33151, MC33152, NCV33152, MC33153, MC34151, MC34152

### Linear Voltage Regulation

General Purpose	MC78LC, MC33565, MC78LXXA, NCV78LXXA, MC33160, MC34160, MC78MXX/A, MC78MXX/A, MC78XX/A, NCV78XX, MC78TXX/A, MC79LXXA, MC79MXX, MC79XX/A, LM317, NCV317, LM350, LM337
Low Drop Out, Fixed Output Voltage, <400 mA	MC33761, NCP500, NCP502, NCP511, NCP512, NCP553, NCP562, NCP563, NCP662, NCP663, NCV553, NCV8184, MC78BC, CS8101, CS8151/C, CS9201, CS9202, L4949, NCV4949, LM2931/A, NCV2931/A, LP2950C/AC, LP2951C/AC, NCV2951, CS8321, NCP551, NCV551, NCP561, NCP5426, NCV8501, NCV8502, NCP582, NCP583, NCP623, MC78PC, NCV4269, NCV4279, NCP580, NCP584, NCP585, NCV4299, MC33275, NCV8518
Low Drop Out, Fixed Output Voltage, ≥400 mA	CS5253B, CS8122, CS8126, CS8129, MC33269, MC34268, NCP1086, NCP1117, NCV1117, NCP3335, NCP630, NCP631, NCP5661, NCP5662, NCP5663, NCV4275, NCV4276, NCV8141, NCV8503, NCV8504, NCV8505, NCV8506, NCP565
Multiple Output	CS8363, CS8183, CS8361, CS8371, CS8156, CS8161, MC33567, MC33762, NCV8509, NCP4672, NCP5504, NCV5504, NCP4523, MC33765
Adjustable Voltage	LP2951C/AC, NCV2951, LM2931C/AC, NCV2931C, NCV8501, NCV8502, NCV8503, NCV8504, CS8182, NCP1086, NCP565, NCP2860, NCP5661, NCP5662, NCP5663, CS5253-1, NCP1117, NCV1117, MC33269, NCV33269, NCP3335A, NCP3334, NCP600

### Voltage Reference

Voltage Reference	NCP100, TLV431, TL431, NCV1009
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### Voltage Supervisory

Voltage Supervisory	MAX809/10, NCP301-5, NCP803, NCP400
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### Battery Management

Charge Controllers	MC33340, MC33342, MC33341, NCP1835
Overvoltage Charger Protection	NCP345, NCP346

### Audio Power Amplifiers

Audio Power Amplifiers	NCP2892, NCP4894
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## Signal Conditioning

### Comparators

Dual Comparators	LM29xx, LM39xx, NCV29xx, NE52xx
Quad Comparators	LM23xx, LM29xx, LM33xx, MC33xx, NCV2xx
Single Comparators	LM21x, LM31x, NCS22xx

### Compandors

Compandors	NE57xx, SA57xx
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### Operational Amplifiers

General Purpose	LM20xx, LM22x, LM25x, LM29xx, LM30xx, LM32x, MC33xx, NCV2xx
High Current	TCA03xx
High Speed	NCS25xx, NE59xx
Low Noise	LM8xx, MC33xx, NE55xx
Low Power	MC33xx, LM358, MC33179
Low Voltage	MC33xxx, NCS20xx, NCS71xx, NE52xx

## Interface & Specials

### Interface & Special Devices

Balanced Modulator/Demodulator	MC1496
Data Transmission	MC14xx, MC26xx, MC34xx, MC75xx, NCV2500, NCV7361A
Smartcard Interface ICs	NCN60xx
Sensor Interface	CS1124, CS41163

### Interface & Special Devices (cont.)

Timers	MC1455, NCV1455
Motor Control	CS4122, CS4192, MC33033, MC33035, MC33039, MC3479, TDA1035, NCV33033, NCV33035, NCV33039, NCV7702B
Automotive LIN/CAN	NCV7356, NCV7380, NCV7382

# Clock Management

Clock Management	
Clock Distribution	MC100LVEP1xx, NB7L11/14, MC100EP210/809, NB6L11/14, NBSG11/14/111, MC100LVEP22X, NB4N11M/S
Clock Synthesis	NBC124xx, NB4N507
EMI Suppression Clocks	NB25xx, NB26xx, NB27xx, NB28xx, NB29xx
Skew Management	MC100EP195, MC100EP196, MC10/100E195, MC10/100E196
Zero Delay Buffers	NB230x
Clock Buffers	NBSG16, MC100LVEP16, NB6L16, NB4L16M, NB4N316M
Clock Multiplexers	NBSG86, NB7L86, MC100EP5X

Clock Management (cont.)	
<b>Clock Generation</b>	
Dividers/Prescalers	NB7N017, NB6L239, MC120XX, MC100EP3X, MC100LVEP3X, NB7L32M
Phase/Frequency Detectors	MC100EP40, MC100EP140
VCO	MC100EL1648
<b>Clock Translators</b>	
Single-Ended to Differential	MC100EPT20/22, MC100ELT20/22
Differential to Single-Ended	MC100EPT21/23/26, MC100ELT21/23/26
AnyLevel to LVDS	NB4N527S

# High Performance Logic

High Performance Logic	
Buffers	MC10/100EP/LVEPxxxx
Coax Drivers	MC10EL/EP89
Comparators	MC10E165x
Counters	MC10/100E/EP016, NB7N017
Crosspoint Switches	NBSG72, NB4N840, NB4L85BM
Flip-Flops	MC10/100xx, NB4L52
Gates	MC10xx, NB7Lxx, NBSGxx
Multiplexers	MC10/100EL/EP5x

High Performance Logic (cont.)	
Receiver/Drivers	NBSG16, MC100LVEP16, NB6L16, NB4L16M, NB4N316M
Registers	MC10xx
Serial/Parallel Converters	MC10/100EP445/6
<b>Translators</b>	
Single-Ended to Differential	MC100EPT20/22/622, MC100ELT20/22
Differential to Single-Ended	MC100EPT21/23/26, MC100ELT21/23/26
AnyLevel to LVDS	NB4N527S

# Standard Logic

Standard Logic	
1-Gate	MC74xx1G, NL17xx, NLV1xx
2-Gate	NL27xx
3-Gate	NL37xx
Analog Switch	MC14xx, MC74xx, NLAS3xxx, NLAS4xxx, NLAS5xxx
Buffers	74VCxx, MC14xx, MC74xx, NL17xx, NL27xx, NL37xx, NLSFxx
Bus Interface	74VCxx, JLC1xx, MC74xx
Comparators	MC14xx
Counters	MC14xx, MC74xx
Flip Flops	74VCxx, MC14xx, MC74xx, NL17xx

Standard Logic (cont.)	
Gates	MC14xx, MC74xx, NL17xx, NL27xx, NLSFxx
Inverters	MC14xx, MC74xx, NL17xx, NL27xx, NL37xx
Latches	74VCxx, MC14xx, MC74xx
Miscellaneous	MC14xx, MC74xx, NLSFxx
Multiplexers	MC14xx, MC74xx, NL7Sxx, NLASxx
Multivibrators	MC14xx, MC74xx
Receiver/Driver	74VCxx, MC74xx
Registers	MC14xx, MC74
Translators	MC14xx

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