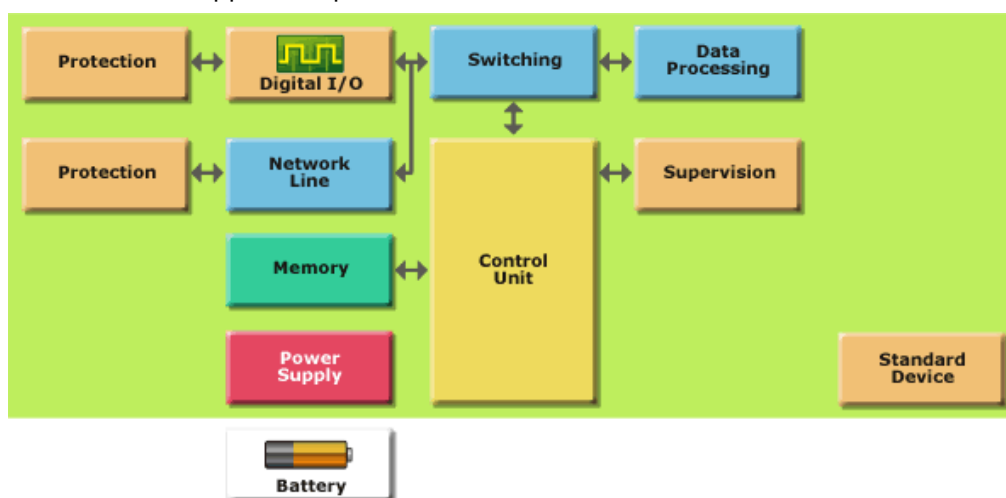


ST 中心局交换核解决方案:

Central Office Switching Core

Both wireline and wireless communication need centralized switching facilities where voice routing and data channeling are performed. ST provides both standard devices and dedicated ASSP components for routing and linking functions, protocol and stack applications. The block diagram facilitates your selection among a wide selection of recommended applicable products.



Central Office Switching Core

1 Protection

(1) Dataline Protection [6]

DA

DALC112

DALC208

(2) ESD Suppressor [32]

DVIULC6-4SC6

ESDA14V2-2BF3

ESDA14V2-4BF2

(3) 1500W Transil [8]

1.5KE

1N5908

LNBTVSx-22xx

(4) 200W Transil [2]

SM2T

SM2T3V3A

(5) 400W Transil [3]

BZW04

SMAJ

SMTY18AM

(6) 5000W Transil [2]

BZW50
LDP24A
(7) 600W Transil [7]
BZW06
P6KE
SM6HT
(8) 100A Trisil [2]
SMP100LC
SMP100MC
(9) 30A Trisil [1]
MP30
(10) 50A Trisil [4]
SMP50
SMP75
SMTPA
(11) 80A Trisil [1]
SMP80MC
(12) Linecard Protection IC [15]
CLP200
CLP270
LCDP1511D
(13) Network Protection IC [2]
TPI
TPN
(14) Terminal Protection IC [2]
TPP
TSI
(15) ESD Suppressor [32]
DVIULC6-4SC6
ESDA14V2-2BF3
ESDA14V2-4BF2

2 Digital I/O

(1) RS-232 [35]
MC1488
MC1489
MC1489A
(2) LCX: HCMOS, 5V I/O Tolerant [38]
74LCX00
74LCX02
74LCX04
(3) LVDS [13]
STLVD111B
STLVD112B

STLVD210B

(4) RS-485 [12]

SERC816

ST485AB

ST485AC

(5) ASI [9]

ST8004

ST8024

STA020

(6) RS-422 RS-423 [9]

ST1480AB

ST1480AC

ST26C31B

3 Network Line

(1) Ethernet [4]

GIGA090

STE10/100

STE100P

(2) Power Switch [9]

ST2042

ST2044

ST2052

4 Memory

(1) Serial EEPROM, Application Specific [4]

M34C02-L

M34C02-R

M34E02

(2) Serial EEPROM, I2C Bus, M24 [19]

M24128-BR

M24128-BW

M24256-BW

(3) Serial EEPROM, Microwire Bus, M93 [19]

M93C46

M93C46-R

M93C46-W

(4) Serial EEPROM, SPI Bus, M95 [16]

M95010-W

M95020-W

M95040

(5) MCP, Flash NAND+LPSDRAM [9]

M65KA256AL

M65KA512AB

M65KG256AB

(6) NAND MLC Large Page [1]

NAND04GW3C2A

(7) NAND SLC Large Page [7]

NAND01GR3B

NAND01GR3B2B

NAND01GW3B

(8) NAND SLC Small Page [5]

NAND128W3A

NAND256R3A

NAND256W3A

(9) Automotive, Burst Mode, M58B [1]

M58BW016D

(10) Flash NOR, Secure [10]

M28W320FSB

M28W320FST

M28W320FSU

(11) Industry Standard, 3V, M29W [23]

M29DW640D

M29W008D

M29W008EB

(12) Industry Standard, 5V, M29F [13]

M29F002BB

M29F002BT

M29F010B

(13) Industry Standard, Boot Block 3V, M28W [10]

M28W160BB

M28W160CB

M28W160CT

(14) Industry Standard, High Performance [2]

M58LW032D

M58LW064D

(15) Multiple Bank 3V, M29DW [5]

M29DW128F

M29DW323DB

M29DW323DT

(16) PC/Server BIOS Flash, M50 [8]

M50FLW040A

M50FLW040B

M50FLW080A

(17) Boot Block 1.8V, M28R [3]

M28R400CB

M28R400CB-KGD

M28R400CT

(18) Dual Bank Page Mode, M59DR [1]

M59DR032EA

(19) MCP, Flash NOR+LPSDRAM, 1.8V, M39 [2]
M39POR9070EO
M65KA128AL

(20) MCP, Flash NOR+PSRAM, 1.8V, M36 [23]
M36DOR6040TO
M36LOR7040TO
M36LOR7050BO

(21) MCP, Flash NOR+PSRAM, 3V, M7/M32/M36 [1]
M36W432T

(22) MCP, Flash NOR+SRAM, 1.8V, M36 [3]
M36WOR5020TO
M36WOR6030BO
M36WOR6030TO

(23) MCP, Flash NOR+SRAM, 3V, M7/M36 [1]
M76DW52003TA

(24) Multiple Bank Burst Mode [16]
M30LOR7000B1
M30LOR8000TO
M30LOT8000BO

(25) Serial Flash for Code Storage, M25P [9]
M25P05-A
M25P10-A
M25P128

(26) Serial Flash for Data Storage, M25PE/M45PE [8]
M25PE10
M25PE20
M25PE40

(27) TIMEKEEPER [21]
M440T1MV
M48T02
M48T08

(28) TIMEKEEPER Supervisor [3]
M48T201V
M48T201Y
M48T212V

(29) ZEROPOWER [17]
M48Z02
M48Z08
M48Z12

(30) 3.3V Supply [3]
M27V160
M27V320
M27V322

(31) 5V Supply [11]

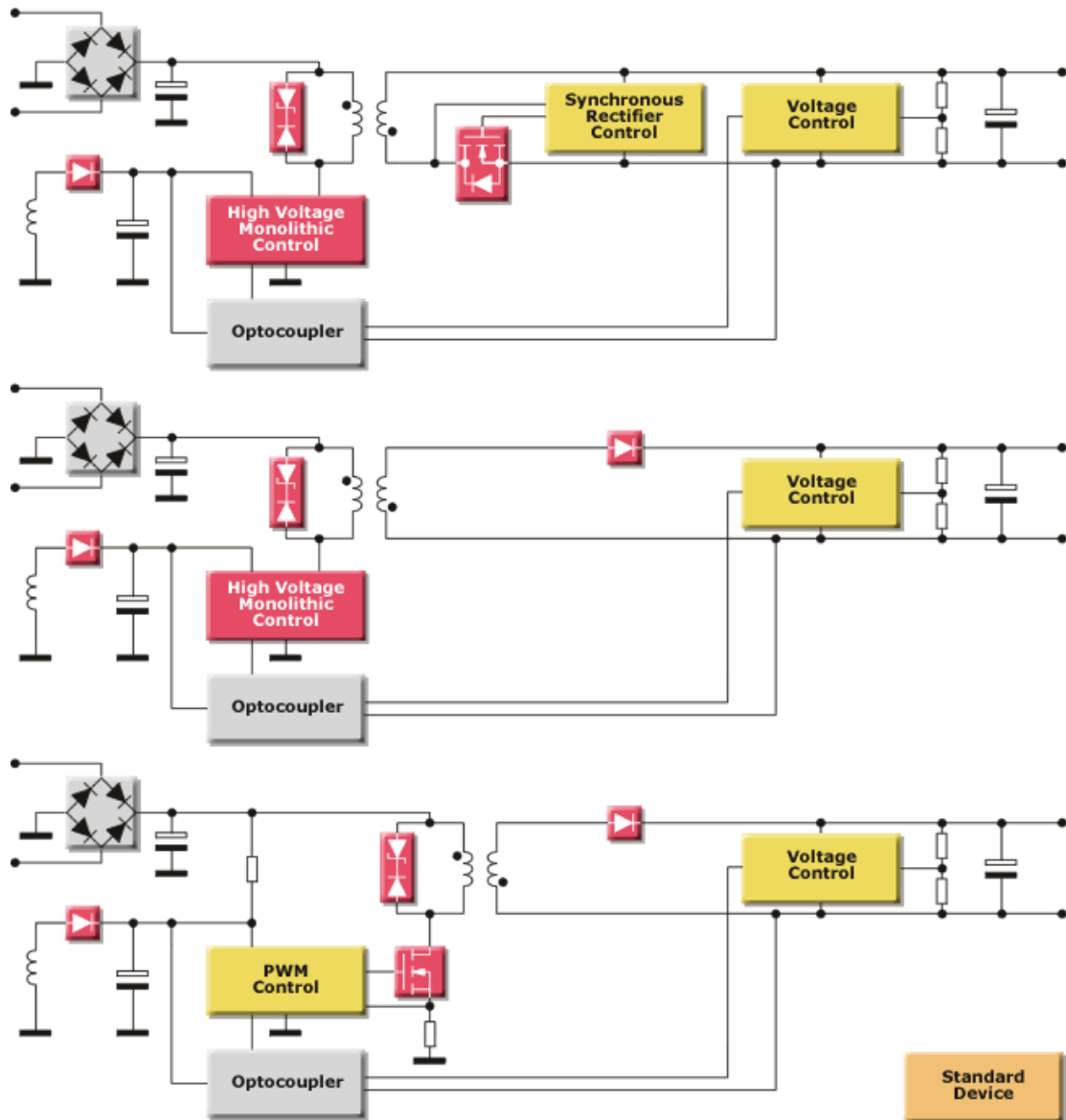
M27C1001
M27C160
M27C2001
(32) Tiger Range, 3V Supply [6]
M27W101
M27W201
M27W401
(33) DSP System Memory [4]
DSM2150F5V
DSM2180F3
DSM2180F3V
(34) Flash PSD [15]
PSD4235G2
PSD4235G2V
PSD4256G6V
(35) OTP PSD [7]
PSD303
PSD311
PSD312
(36) PSRAM, 1.8V, M69 [7]
M69AR024B
69AR048B
M69KB096AA
(37) PSRAM, 3.0V, M69 [3]
M69AW024B
M69AW024BE
M69AW048B
(38) SRAM, Low Power Asynchronous, 3V, M68AW [3]
M616Z08
M68AW127B
M68AW128M
(39) SRAM, Low Power Asynchronous, 5V, M68AF [1]
M68AF127B
(40) RFID and RF Memory ICs [12]
CR14
CRX14
LRI2K

5 Power Supply

辅助电源和墙上插座适配器

Auxiliary Power Supply & Wall-Plug Adaptor

Common auxiliary Power supply uses fly-back topology. However at very low power the buck topology is used. Typically these are low power solutions with very low cost and low stand-by consumption. The block diagram facilitates your selection among a wide selection of recommended applicable products



Auxiliary Power Supply & Wall-Plug Adaptor

1

(1) Ultrafast 200V, 300V and 400V [80]

BYT01

BYT03

BYT08

(2) Power Schottky [136]

1N5817

1N5818

1N5819



2

MOSFET Snubber [1]

PKC-136

3 High Voltage Monolithic Control

(1) High Voltage Converters [12]

VIPER100-E

VIPER100A-E

VIPER12A-E

(2) Load Sharing Controllers [3]

L6590

L6590A

L6615



4

Low Voltage N Channel [241]

[2N7000](#)

[2N7002](#)

[STB100NF03L-03](#)

5 Synchronous Rectifier Control

STSR3

STSR30

6 Voltage Control

TL1431

TL431

TS2431

7 PWM Control

L5991

L6668

UC2842B

8 Standard Device

(1) 200W Transil [2]

SM2T

SM2T3V3A

(2) 400W Transil [3]

BZW04

SMAJ

SMTY18AM

(3) 600W Transil [7]

BZW06

P6KE

SM6HT

(4) 1500W Transil [8]

1.5KE

1N5908

LNBTVSx-22xx

(5) 5000W Transil [2]

BZW50

LDP24A

(6) Precision [3]

OP07

TS512

TS514

(7) LED Driver (Power Logic) [11]

STFPC311

STP04CM596

STP08C596

(8) High Voltage [7]

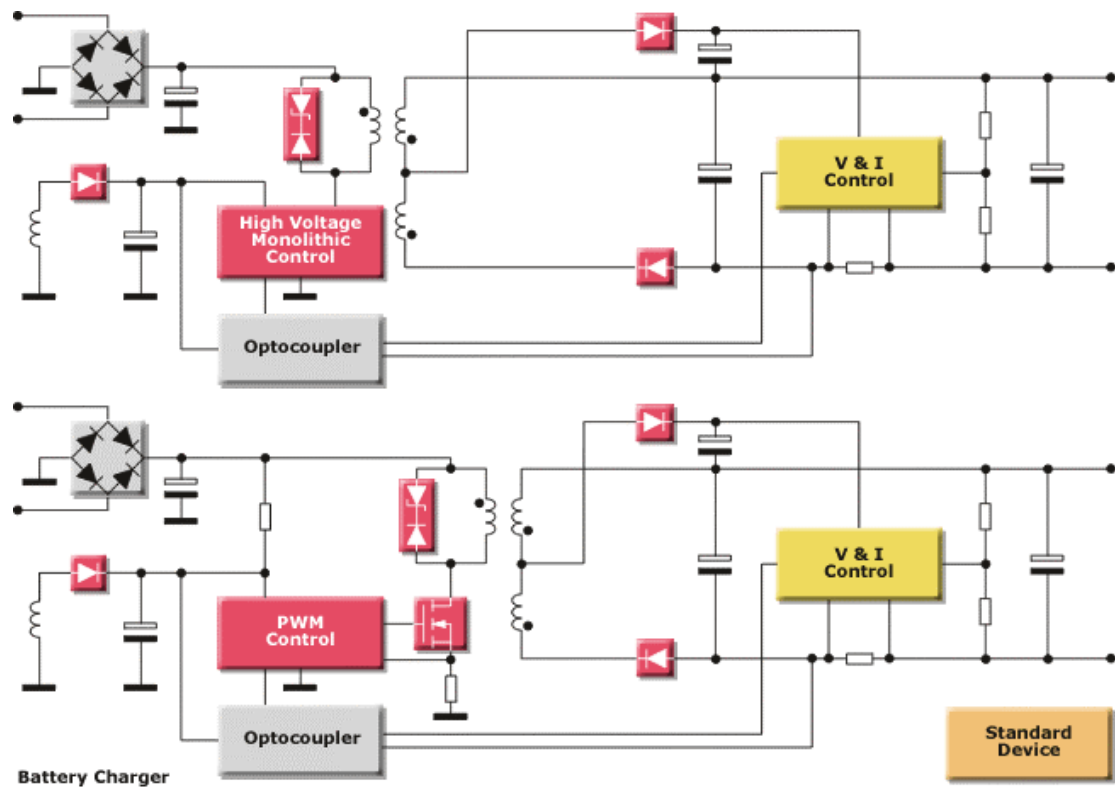
BF420

BF421

MMBTA42

电池充电器(Battery Charger)

STMicroelectronics provides battery charger ICs and full solutions for cell phones, note books, digital cameras, hand tools and many other battery-powered applications. Several solutions are proposed to charge lithium-ion, nickel-metal hydride and nickel-cadmium batteries. Switched mode solutions are mainly used in portable or high power applications. The following diagram shows a wide range of products for battery charger design.



1

(1) Voltage and Current Controllers [9]

TSM1011

TSM1012

TSM1013

(2) Ultrafast 200V, 300V and 400V [80]

BYT01

BYT03

BYT08

2

1N5817

1N5818

1N5819

3 High Voltage Monolithic Control

(1) High Voltage Converters [12]

VIPER100-E

VIPER100A-E

VIPER12A-E

(2) Load Sharing Controllers [3]

L6590

L6590A

L6615

4 PWM Control

PWM Controllers [10]

L5991

L6668

UC2842B

5



(1) High Voltage N Channel [66]

STB11NM80

STB12NK80Z

STB12NK80Z-S

(2) Low Voltage N Channel [241]

2N7000

2N7002

STB100NF03L-03

(3) Medium Voltage N Channel [218]

IRF620

IRF630

IRF630M

6 V&I Control

Medium Voltage N Channel [218]

IRF620

IRF630

IRF630M

7 Standard Device

(1) MOSFET Snubber [1]

PKC-136

(2) 200W Transil [2]

SM2T

SM2T3V3A

(3) 400W Transil [3]

BZW04

SMAJ

SMTY18AM

(4) 600W Transil [7]

BZW06

P6KE

SM6HT

(5) 1500W Transil [8]

1.5KE

1N5908

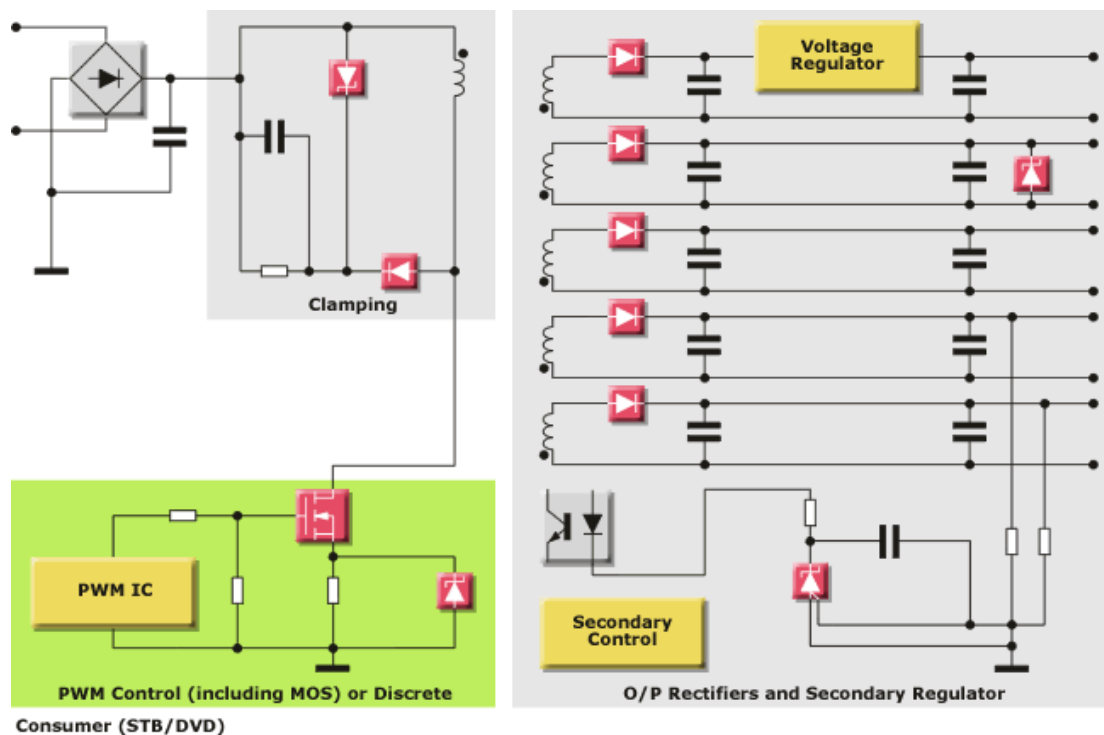
LNBTVSx-22xx

(6) Precision [3]

OP07
 TS512
 TS514
 (7) LED Driver (Power Logic) [11]
 STFPC311
 STP04CM596
 STP08C596
 (8) High Voltage [7]
 BF420
 BF421
 MMBTA42

消费类(STB/DVD)Consumer (STB/DVD)

The simplicity of the fly-back topology control associated with a low power level has enabled the integration of the control and the power section of set-top-box and DVD player auxiliary supply. The standby power dissipation meets the stringent requirements of the regulations (<1W or less). STMicroelectronics has designed several of such monolithic power controllers. The following diagram shows a wide range of products for the design of STB & DVD auxiliary power supplies



[BZW06](#)

[P6KE](#)

[SM6HT](#)

2 

[STTA12006](#)

[STTA1206](#)

[STTA2006](#)

3 

[IRF620](#)

[IRF630](#)

[IRF630M](#)

4 PWM IC

[L5991](#)

[L6668](#)

[UC2842B](#)

5 

(1) Power Schottky [136]

[1N5817](#)

[1N5818](#)

[1N5819](#)

(2) Ultrafast 200V, 300V and 400V [80]

[BYT01](#)

[BYT03](#)

[BYT08](#)

6 Voltage Regulator

[KD1084AXX](#)

[KD1084AXX15](#)

[KD1084AXX18](#)

7 

High Power Shunt [6]

[TL1431](#)

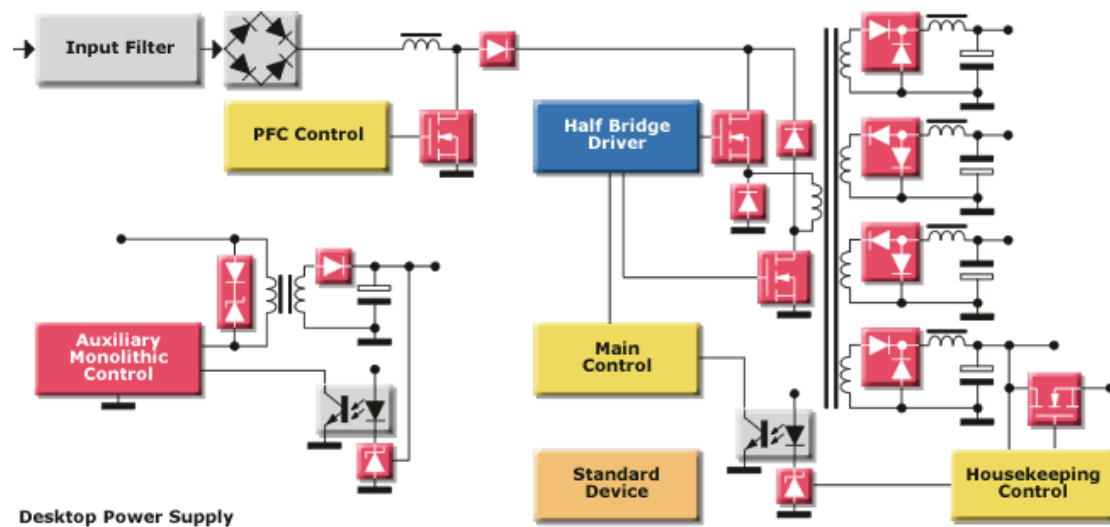
[TL431](#)

[TS2431](#)

台式计算机电源(Desktop Power Supply)

Common desktop power supplies addressing the clone market use an half bridge driving two power bipolars. The control is made up of a single chip solution that combines pulse width modulation and housekeeping to meet cost target. The following diagram shows a wide range of products

for such power supplies.



1 Auxiliary Monolithic Control

(1) High Voltage Converters [12]

[VIPER100-E](#)

[VIPER100A-E](#)

[VIPER12A-E](#)

(2) Load Sharing Controllers [3]

[L6590](#)

[L6590A](#)

[L6615](#)



2

MOSFET Snubber [1]

[PKC-136](#)

3 PFC Control

[L4981](#)

[L6561](#)

[L6562](#)

(2) PFC controllers [4]

[L4981](#)

[L6561](#)

[L6562](#)

3



(1) High Voltage N Channel [66]

[STB11NM80](#)

[STB12NK80Z](#)

[STB12NK80Z-S](#)

(2) Low Voltage N Channel [241]

[2N7000](#)

[2N7002](#)

[STB100NF03L-03](#)

(3) Medium Voltage N Channel [218]

[IRF620](#)

[IRF630](#)

[IRF630M](#)

4 

Ultrafast 800V, 1000V and 1200V [41]

[BYT08P](#)

[BYT08PI-1000](#)

[BYT12P](#)

5 

(1) Ultrafast 600V [38]

[STTA12006](#)

[STTA1206](#)

[STTA2006](#)

(2) Ultrafast 800V, 1000V and 1200V [41]

[BYT08P](#)

[BYT08PI-1000](#)

[BYT12P](#)

6 Main Control

[L5991](#)

[L6668](#)

[UC2842B](#)

7 Standard Device

(1) 200W Transil [2]

SM2T

SM2T3V3A

(2) 400W Transil [3]

BZW04

SMAJ

SMTY18AM

(3) 600W Transil [7]

BZW06

P6KE

SM6HT

(4) 1500W Transil [8]

1.5KE

1N5908

[LNBTVSx-22xx](#)

(5) 5000W Transil [2]

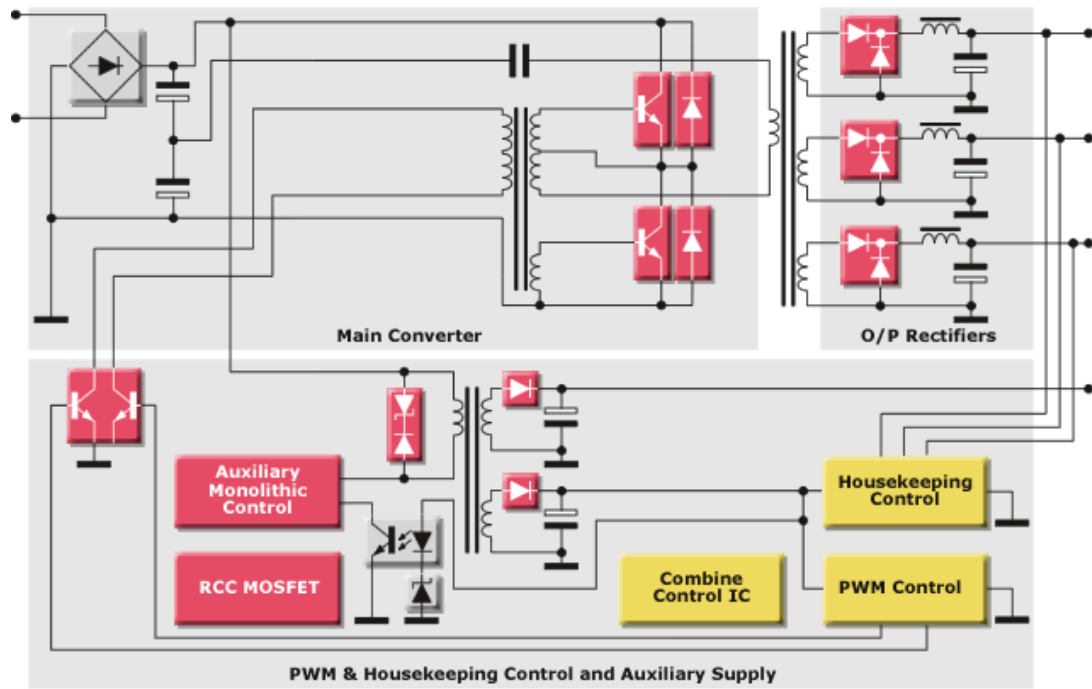
BZW50
LDP24A
(6) Precision [3]
OP07
TS512
TS514
(7) LED Driver (Power Logic) [11]
STFPC311
STP04CM596
STP08C596
(8) High Voltage [7]
BF420
BF421
MMBTA42

8
[1N5817](#)
[1N5818](#)
[1N5819](#)
9 Housekeeping Control
[L6610](#)
[L6611](#)
[TSM101](#)

台式计算机电源

Desktop Power Supply (Clone Market)

Common desktop power supplies addressing the clone market use an half bridge driving two power bipolars. The control is made up of a single chip solution that combines pulse width modulation and housekeeping to meet cost target. The following diagram shows a wide range of products for such power supplies.



Desktop Power Supply (Clone Market)



This query produced no results, try a less restrictive combination.

2 Auxiliary Monolithic Control

[VIPER100-E](#)

[VIPER100A-E](#)

[VIPER12A-E](#)

3 RCC MOSFET

[IRF620](#)

[IRF630](#)

[IRF630M](#)



[PKC-136](#)



[1N5817](#)

[1N5818](#)

[1N5819](#)



Ultrafast 200V, 300V and 400V [80]

[BYT01](#)

[BYT03](#)

[BYT08](#)



7

Power Schottky [136]

[1N5817](#)

[1N5818](#)

[1N5819](#)

8 Housekeeping Control

[L6610](#)

[L6611](#)

[TSM101](#)

9 Combine Control IC

[L6610](#)

[L6611](#)

[TSM101](#)

10 PWM Control

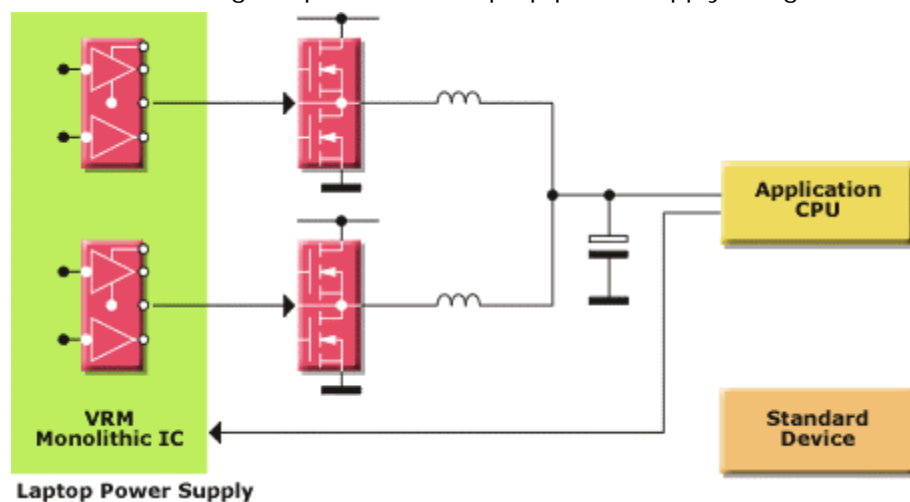
[SG2525](#)

[SG3524](#)

[SG3525](#)

便携式电脑电源(Laptop Power Supply)

Generally laptop power supplies use highly-efficient on-board synchronous step-down regulation with multiple channels switching at high frequency. The following diagram shows a wide range of products for laptop power supply design.



1

[2N7000](#)

[2N7002](#)

[STB100NF03L-03](#)

2 Standard Device

(1) 200W Transil [2]

SM2T

SM2T3V3A

(2) 400W Transil [3]

BZW04

SMAJ

SMTY18AM

(3) 600W Transil [7]

BZW06

P6KE

SM6HT

(4) 1500W Transil [8]

1.5KE

1N5908

LNBTVSx-22xx

(5) 5000W Transil [2]

BZW50

LDP24A

(6) Precision [3]

OP07

TS512

TS514

(7) LED Driver (Power Logic) [11]

STFPC311

STP04CM596

STP08C596

(8) High Voltage [7]

BF420

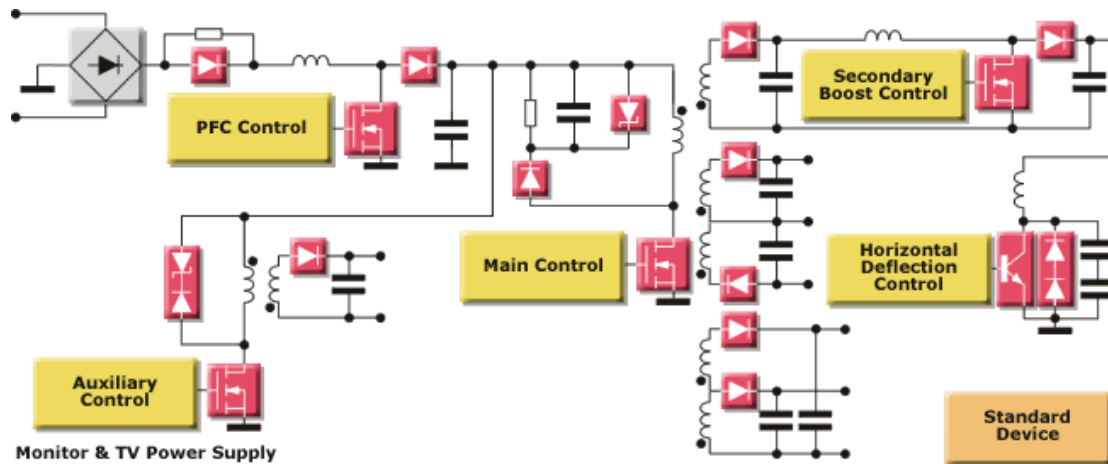
BF421

MMBTA42

监视器和 TV 电源(Monitor & TV Power Supply)

Most monitor and TV power supplies still use a fly-back topology.

Depending on the system performance, a power factor corrector and an intelligent inrush current limitation may be required. The following diagram shows a wide range of products for monitor and TV power supplies.



1 PEC Control

PFC controllers [4]

[L4981](#)

[L6561](#)

[L6562](#)



(1) High Voltage N Channel [66]

[STB11NM80](#)

[STB12NK80Z](#)

[STB12NK80Z-S](#)

(2) Medium Voltage N Channel [218]

[IRF620](#)

[IRF630](#)

[IRF630M](#)



[BYT08P](#)

[BYT08PI-1000](#)

[BYT12P](#)



MOSFET Snubber [1]

[PKC-136](#)



Low Voltage N Channel [241]

[2N7000](#)

[2N7002](#)

[STB100NF03L-03](#)

6 Auxiliary Control

Resonant Controllers [3]

[L6565](#)

[L6598](#)

[L6599](#)

High Voltage Converters [12]

[VIPER100-E](#)

[VIPER100A-E](#)

[VIPER12A-E](#)

7

Ultrafast 800V, 1000V and 1200V [41]

[BYT08P](#)

[BYT08PI-1000](#)

[BYT12P](#)

8

(1) 1500W Transil [8]

1.5KE

1N5908

LNBTVSx-22xx

(2) 600W Transil [7]

BZW06

P6KE

SM6HT

(3) 400W Transil [3]

BZW04

SMAJ

SMTY18AM

9 Main Control

[L6565](#)

[L6598](#)

[L6599](#)

10

Ultrafast 200V, 300V and 400V [80]

[BYT01](#)

[BYT03](#)

[BYT08](#)

11 Secondary Boost Control

[STV6889](#)

[STV9118](#)

[TDA1175P](#)

12 Horizontal Deflection Control

STV6889

STV9118

TDA1175P

13 Standard Device

(1) 200W Transil [2]

SM2T

SM2T3V3A

(2) 400W Transil [3]

BZW04

SMAJ

SMTY18AM

(3) 600W Transil [7]

BZW06

P6KE

SM6HT

(4) 1500W Transil [8]

1.5KE

1N5908

LNBTVSx-22xx

(5) 5000W Transil [2]

BZW50

LDP24A

(6) Precision [3]

OP07

TS512

TS514

(7) LED Driver (Power Logic) [11]

STFPC311

STP04CM596

STP08C596

(8) High Voltage [7]

BF420

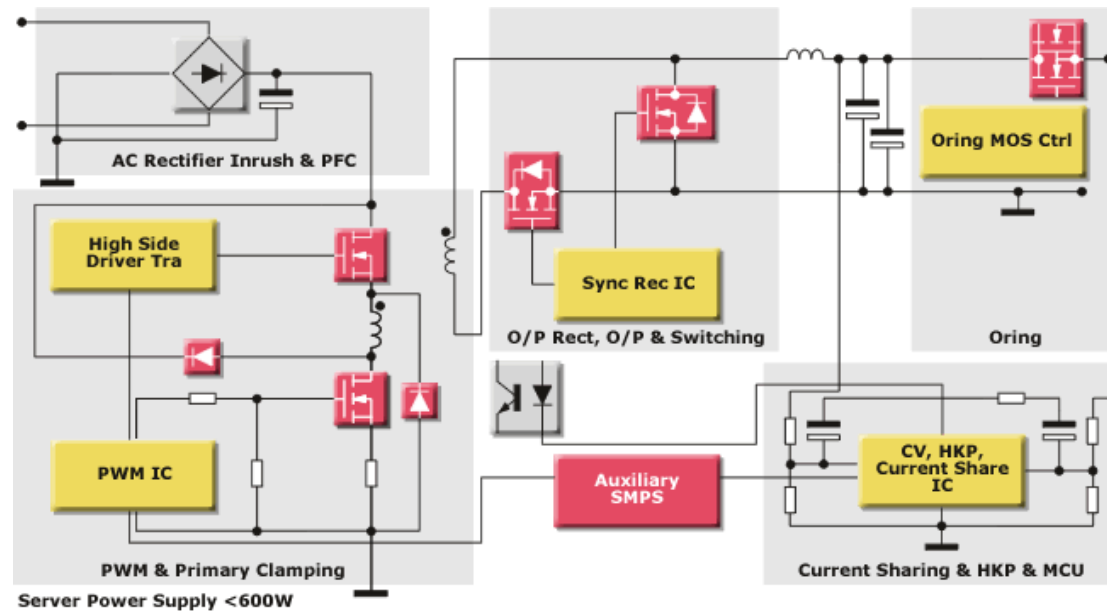
BF421

MMBTA42

小于 **600W** 服务器电源(**Server Power Supply**
<600W)

大于 **600W** 服务器电源(**Server Power Supply**
>600W)

Latest server Switched Mode Power Supplies require sophisticated solutions due to the high power density handling, more than 20w/cu in, especially in the 1U to 2U sizes. STMicroelectronics provides with dedicated components for the primary and secondary stages as shown on the diagram



1 High Side Driver Tra

L5991
L6668
UC2842B

2

Ultrafast 600V [45]
STTA12006
STTA1206
STTA2006

3 PWM IC

[L5991](#)
[L6668](#)
[UC2842B](#)

4

Medium Voltage N Channel [218]
IRF620
IRF630
IRF630M

5

Ultrafast 600V [45]

STTA12006

STTA1206

STTA2006



(1) Power Schottky [136]

1N5817

1N5818

1N5819

(2) Medium Voltage N Channel [218]

IRF620

IRF630

IRF630M

(3) Multifunction Switching Regulators [24]

L4959

LNBEH21

LNBH21

7 Sync Rec IC

L5991

L6668

UC2842B

8 Auxiliary SMPS

(1) Medium Voltage N Channel [218]

IRF620

IRF630

IRF630M

(2) PWM Controllers [10]

L5991

L6668

UC2842B

(3) Ultrafast 200V, 300V and 400V [80]

BYT01

BYT03

BYT08

(4) 600W Transil [7]

BZW06

P6KE

SM6HT

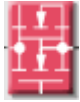
(5) Power Schottky [136]

1N5817

1N5818

1N5819

9



Medium Voltage N Channel [218]

[IRF620](#)

[IRF630](#)

[IRF630M](#)

10 Oring MOS Ctrl

(1) Power Schottky [136]

[1N5817](#)

[1N5818](#)

[1N5819](#)

(2) Industry Standard [52]

[LM119](#)

[LM139](#)

[LM193](#)

11 CV, HKP, Current Share IC

(1) Low-Drop [115]

[KD1084AXX](#)

[KD1084AXX15](#)

[KD1084AXX18](#)

(2) High Power Shunt [6]

[TL1431](#)

[TL431](#)

[TS2431](#)

(3) Ultrafast 200V, 300V and 400V [80]

[BYT01](#)

[BYT03](#)

[BYT08](#)

(4) Industry Standard [52]

[LM119](#)

[LM139](#)

[LM193](#)

(5) Supervisors/Housekeeping [12]

[L6610](#)

[L6611](#)

[TSM101](#)

(6) ST7 - 8-bit Microcontrollers [160]

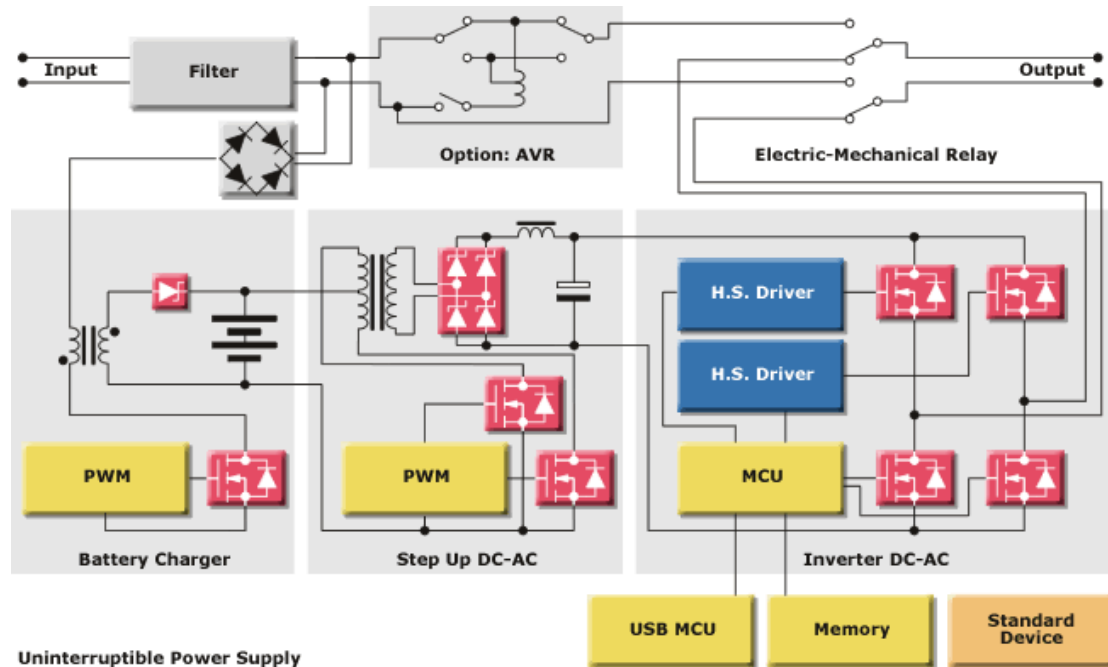
[ST72104G1](#)

[ST72104G2](#)

[ST72124J2](#)

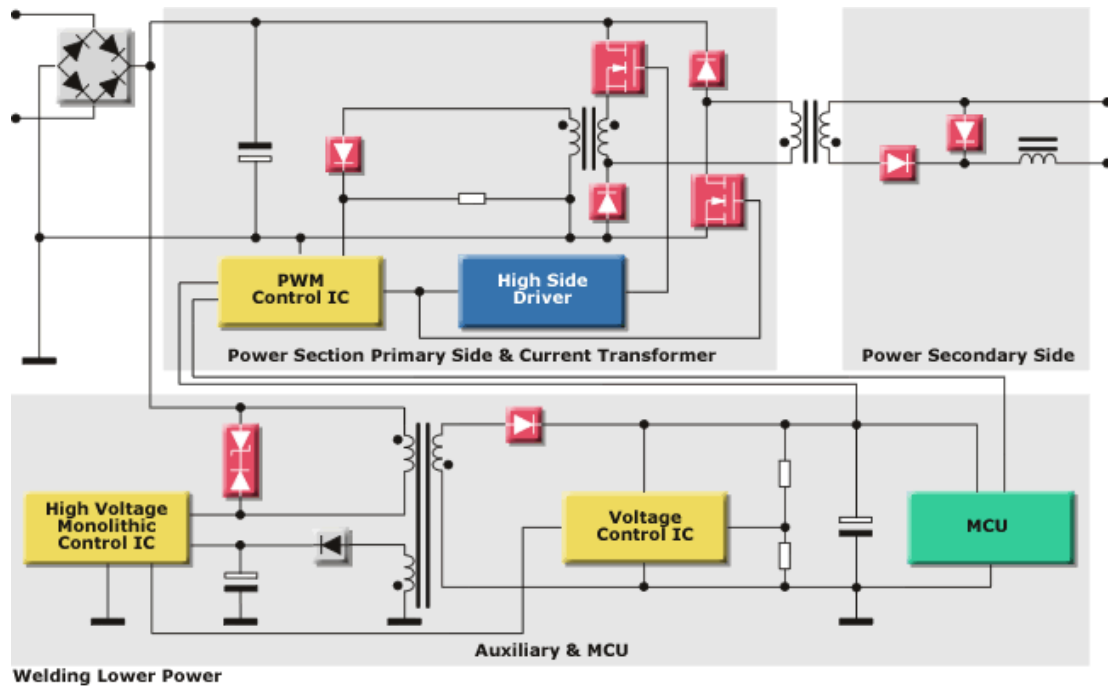
不间断电源(Uninterruptible Power Supply)

In common Off-line UPS, the power is derived directly from the power line and picked from the battery when the line fails. Then the battery powered inverter turns on to provide with the AC output. A battery charger is needed at the front end level. The block diagram shows the products that are recommended.



小功率焊接电源 / 大功率焊接电源 (Welding - Low Power / Welding High Power)

Most of low-power welding equipments use half-bridge forward converter topology. The block diagram facilitates your selection among a wide selection of recommended applicable products



1 

Power Schottky [136]

[1N5817](#)

[1N5818](#)

[1N5819](#)

2 PWM Control IC

[L5991](#)

[L6668](#)

[UC2842B](#)

3 

[IRF620](#)

[IRF630](#)

[IRF630M](#)

4 

[BYT01](#)

[BYT03](#)

[BYT08](#)

5 

MOSFET Snubber [1]

[PKC-136](#)

6 High Voltage Monolithic Control IC

[VIPER100-E](#)
[VIPER100A-E](#)
[VIPER12A-E](#)

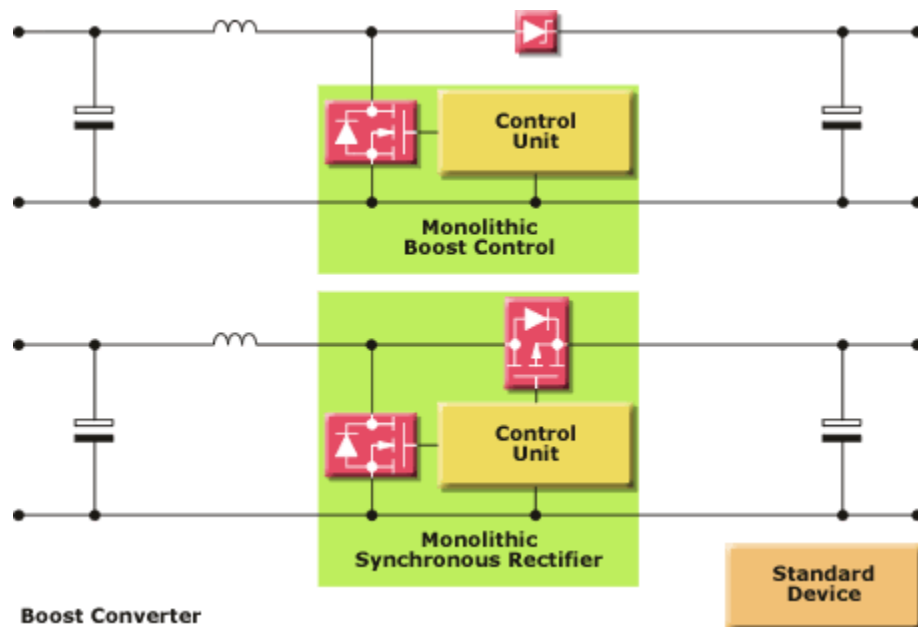
7 Voltage Control IC

[TL1431](#)
[TL431](#)
[TS2431](#)

8 MCU

[ST72104G1](#)
[ST72104G2](#)
[ST72124J2](#)

升压转换器(Boost Converter)



1

(1) Power Schottky [136]

[1N5817](#)

[1N5818](#)

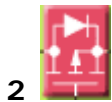
[1N5819](#)

(2) Ultrafast 200V, 300V and 400V [79]

[BYT01](#)

[BYT03](#)

[BYT08](#)



2

(1) Low Voltage N Channel [241]

[2N7000](#)

[2N7002](#)

[STB100NF03L-03](#)

(2) Medium Voltage N Channel [218]

[IRF620](#)

[IRF630](#)

[IRF630M](#)

3 Control Unit

[L5991](#)

[L6668](#)

[UC2842B](#)



4

(1) High Voltage N Channel [66]

[STB11NM80](#)

[STB12NK80Z](#)

[STB12NK80Z-S](#)

(2) Medium Voltage N Channel [218]

[IRF620](#)

[IRF630](#)

[IRF630M](#)

5 Standard Device

(1) 200W Transil [2]

SM2T

SM2T3V3A

(2) 400W Transil [3]

BZW04

SMAJ

SMTY18AM

(3) 600W Transil [7]

BZW06

P6KE

SM6HT

(4) 1500W Transil [8]

1.5KE

1N5908

LNBTVSx-22xx

(5) 5000W Transil [2]

BZW50

LDP24A

(6) Precision [3]

OP07

TS512

TS514

(7) LED Driver (Power Logic) [11]

STFPC311

STP04CM596

STP08C596

(8) High Voltage [7]

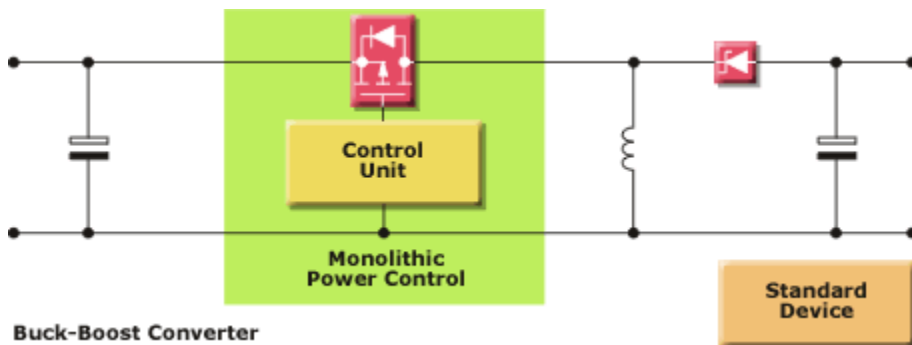
BF420

BF421

MMBTA42

降压-升压转换器(Buck-Boost Converter)

Buck-boost converters are mainly used in regulated DC power supplies. The block diagram facilitates your selection among a wide choice of recommended applicable products.



[STB16PF06L](#)

[STB80PF55](#)

[STD10PF06](#)

2 Control Unit

[L5991](#)

[L6668](#)

[UC2842B](#)



(1) Power Schottky [136]

[1N5817](#)

[1N5818](#)

[1N5819](#)

(2) Ultrafast 200V, 300V and 400V [79]

[BYT01](#)

[BYT03](#)

[BYT08](#)

4 Standard Device

(1) 200W Transil [2]

[SM2T](#)

[SM2T3V3A](#)

(2) 400W Transil [3]

[BZW04](#)

[SMAJ](#)

[SMTY18AM](#)

(3) 600W Transil [7]

[BZW06](#)

[P6KE](#)

[SM6HT](#)

(4) 1500W Transil [8]

[1.5KE](#)

[1N5908](#)

[LNBTVSx-22xx](#)

(5) 5000W Transil [2]

[BZW50](#)

[LDP24A](#)

(6) Precision [3]

[OP07](#)

[TS512](#)

[TS514](#)

(7) LED Driver (Power Logic) [11]

[STFPC311](#)

[STP04CM596](#)

[STP08C596](#)

(8) High Voltage [7]

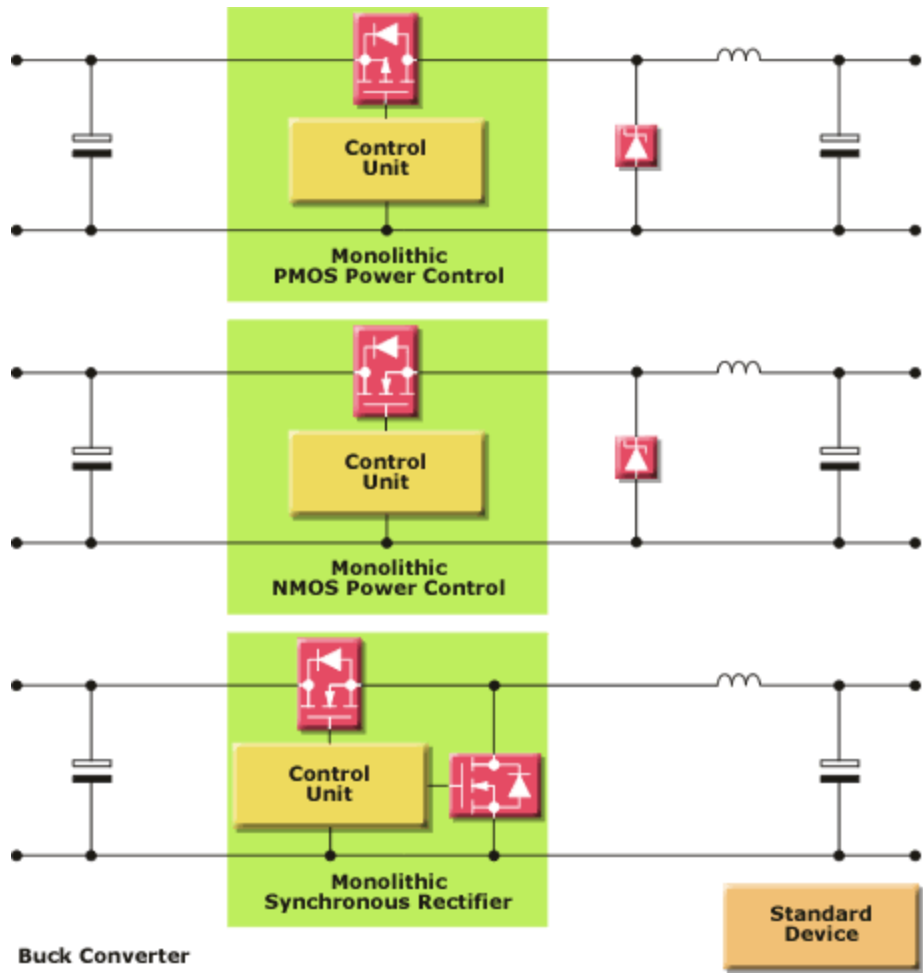
[BF420](#)

[BF421](#)

[MMBTA42](#)

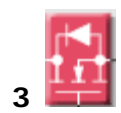
降压转换器(Buck Converter)

Buck converters are mainly used in regulated DC power supplies and DC motor speed control. The block diagram facilitates your selection among a wide choice of recommended applicable products



Low Voltage P Channel [25]
[STB16PF06L](#)
[STB80PF55](#)
[STD10PF06](#)

2 Control Unit
[L5991](#)
[L6668](#)
[UC2842B](#)



(1) High Voltage N Channel [66]
[STB11NM80](#)
[STB12NK80Z](#)
[STB12NK80Z-S](#)
 (2) Low Voltage N Channel [241]
[2N7000](#)

[2N7002](#)

[STB100NF03L-03](#)

(3) Medium Voltage N Channel [218]

[IRF620](#)

[IRF630](#)

[IRF630M](#)

4 

(1) Power Schottky [136]

[1N5817](#)

[1N5818](#)

[1N5819](#)

(2) Ultrafast 200V, 300V and 400V [79]

[BYT01](#)

[BYT03](#)

[BYT08](#)

5 Standard Device

(1) 200W Transil [2]

SM2T

SM2T3V3A

(2) 400W Transil [3]

BZW04

SMAJ

SMTY18AM

(3) 600W Transil [7]

BZW06

P6KE

SM6HT

(4) 1500W Transil [8]

1.5KE

1N5908

LNBTVSx-22xx

(5) 5000W Transil [2]

BZW50

LDP24A

(6) Precision [3]

OP07

TS512

TS514

(7) LED Driver (Power Logic) [11]

STFPC311

STP04CM596

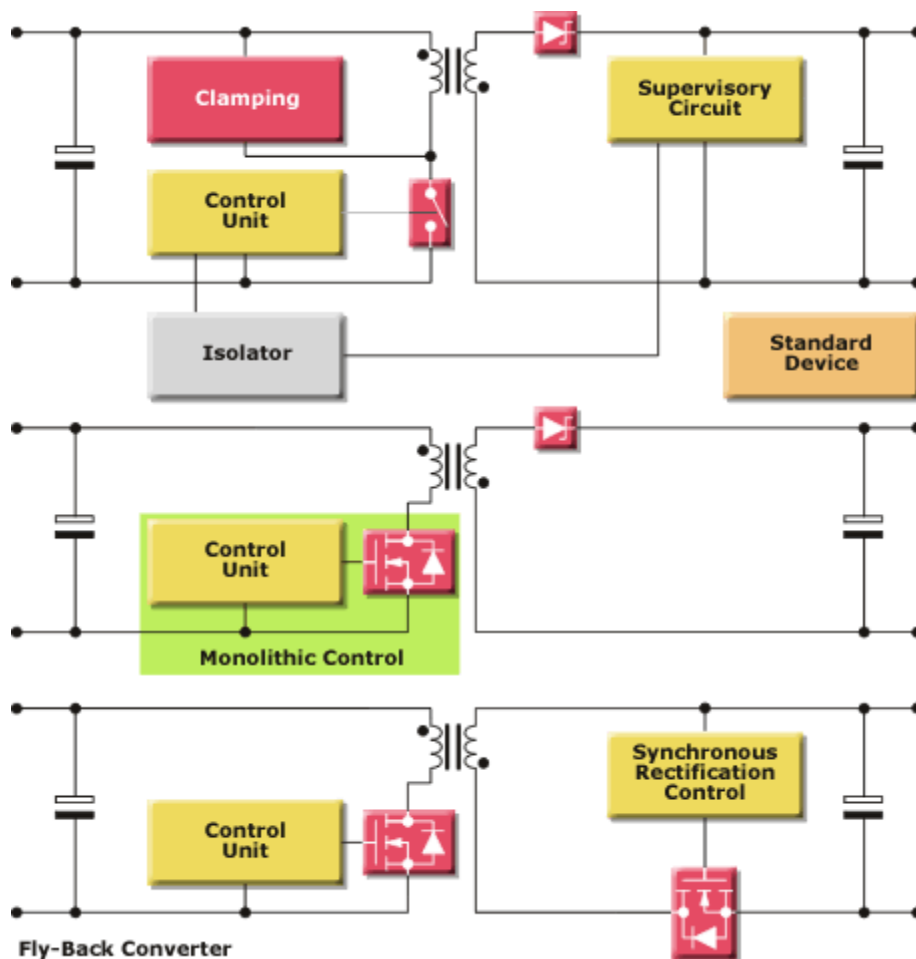
STP08C596

(8) High Voltage [7]

BF420
BF421
MMBTA42

反激式转换器(Fly-back Converter)

Fly-back converters are mainly used in AC to DC power supplies. It provides efficient stabilized DC outputs at extremely effective cost. It is particularly useful for multiple-output applications. The block diagram facilitates your selection among a wide choice of recommended applicable products



1 Clamping

(1) 200W Transil [2]

SM2T

SM2T3V3A

(2) 400W Transil [3]

BZW04

SMAJ

SMTY18AM

(3) 600W Transil [7]

[BZW06](#)

[P6KE](#)

[SM6HT](#)

(4) 1500W Transil [8]

[1.5KE](#)

[1N5908](#)

[LNBTVSx-22xx](#)

(5) 5000W Transil [2]

[BZW50](#)

[LDP24A](#)

(6) MOSFET Snubber [1]

[PKC-136](#)

(7) Ultrafast 800V, 1000V and 1200V [41]

[BYT08P](#)

[BYT08PI-1000](#)

[BYT12P](#)

2

(1) Ultrafast 200V, 300V and 400V [79]

[BYT01](#)

[BYT03](#)

[BYT08](#)

(2) Power Schottky [136]

[1N5817](#)

[1N5818](#)

[1N5819](#)

3 Supervisory Circuit

(1) High Power Shunt [6]

[TL1431](#)

[TL431](#)

[TS2431](#)

(2) Low Power Shunt [8]

[TS4040](#)

[TS4041](#)

[TS431](#)

4 Control Unit

[L5991](#)

[L6668](#)

[UC2842B](#)

5

(1) High Voltage N Channel [66]

[STB11NM80](#)

[STB12NK80Z](#)

[STB12NK80Z-S](#)

(2) Medium Voltage N Channel [218]

[IRF620](#)

[IRF630](#)

[IRF630M](#)

(3) Low Voltage N Channel [241]

[2N7000](#)

[2N7002](#)

[STB100NF03L-03](#)

6 Synchronous Rectification Control

Multifunction Switching Regulators [2]

[STSR3](#)

[STSR30](#)

7 Standard Device

(1) 200W Transil [2]

SM2T

SM2T3V3A

(2) 400W Transil [3]

BZW04

SMAJ

SMTY18AM

(3) 600W Transil [7]

BZW06

P6KE

SM6HT

(4) 1500W Transil [8]

1.5KE

1N5908

LNBTVSx-22xx

(5) 5000W Transil [2]

BZW50

LDP24A

(6) LED Driver (Power Logic) [11]

STFPC311

STP04CM596

STP08C596

(7) High Voltage [7]

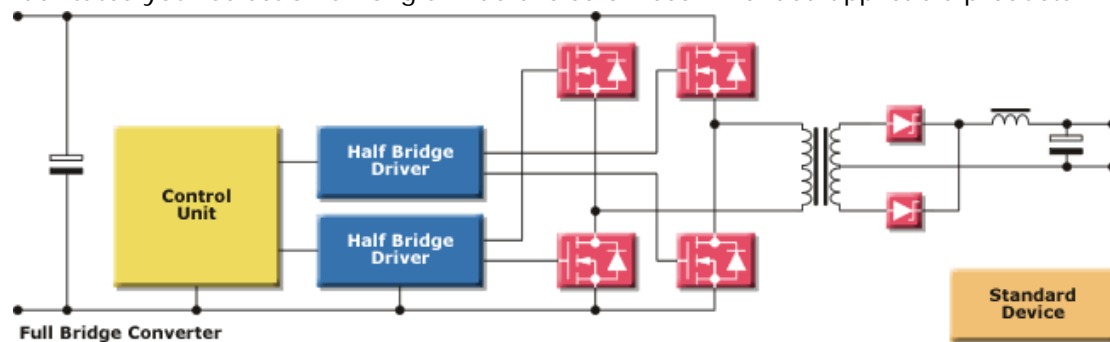
BF420

BF421

MMBTA42

全桥转换器(Full-Bridge Converter)

Full-bridge converters are mainly used in high power applications. The block diagram facilitates your selection among a wide choice of recommended applicable products.



1 Control Unit

[L5991](#)

[L6668](#)

[UC2842B](#)



(1) High Voltage N Channel [66]

[STB11NM80](#)

[STB12NK80Z](#)

[STB12NK80Z-S](#)

(2) Low Voltage N Channel [241]

[2N7000](#)

[2N7002](#)

[STB100NF03L-03](#)

(3) Medium Voltage N Channel [218]

[IRF620](#)

[IRF630](#)

[IRF630M](#)



(1) Power Schottky [136]

[1N5817](#)

[1N5818](#)

[1N5819](#)

4 Standard Device

(1) 200W Transil [2]

[SM2T](#)

[SM2T3V3A](#)

(2) 400W Transil [3]

[BZW04](#)

[SMAJ](#)

[SMTY18AM](#)

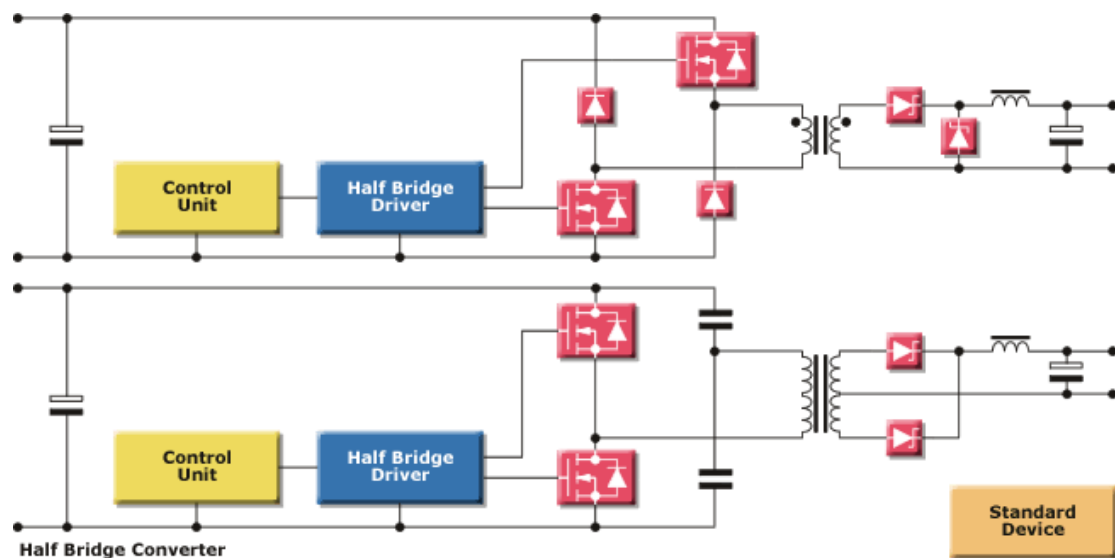
(3) 600W Transil [7]

[BZW06](#)

P6KE
SM6HT
(4) 1500W Transil [8]
1.5KE
1N5908
LNBTVSx-22xx
(5) 5000W Transil [2]
BZW50
LDP24A
(6) Precision [3]
OP07
TS512
TS514
(7) LED Driver (Power Logic) [11]
STFPC311
STP04CM596
STP08C596
(8) High Voltage [7]
BF420
BF421
MMBTA42

半桥转换器(Half-Bridge Converter)

Half-bridge converter is the most friendly solution for direct off-line switchmode power supplies because of the reduced voltage stress on the primary switching devices. The block diagram facilitates your selection among a wide choice of recommended applicable products



1 Control Unit

(1) PWM Controllers [10]

[L5991](#)

[L6668](#)

[UC2842B](#)

(2) Synchronous Rectification Controllers [3]

[SG2525](#)

[SG3524](#)

[SG3525](#)

2

(1) Ultrafast 800V, 1000V and 1200V [41]

[BYT08P](#)

[BYT08PI-1000](#)

[BYT12P](#)

(2) Ultrafast 600V [38]

[STTA12006](#)

[STTA1206](#)

[STTA2006](#)

(3) Ultrafast 200V, 300V and 400V [79]

[BYT01](#)

[BYT03](#)

[BYT08](#)

3

(1) High Voltage N Channel [66]

[STB11NM80](#)

[STB12NK80Z](#)

[STB12NK80Z-S](#)

(2) Low Voltage N Channel [241]

[2N7000](#)

[2N7002](#)

[STB100NF03L-03](#)

(3) Medium Voltage N Channel [218]

[IRF620](#)

[IRF630](#)

[IRF630M](#)

4

Power Schottky [136]

[1N5817](#)

[1N5818](#)

[1N5819](#)

5 Standard Device

(1) 200W Transil [2]

SM2T

SM2T3V3A

(2) 400W Transil [3]

BZW04

SMAJ

SMTY18AM

(3) 600W Transil [7]

BZW06

P6KE

SM6HT

(4) 1500W Transil [8]

1.5KE

1N5908

LNBTVSx-22xx

(5) 5000W Transil [2]

BZW50

LDP24A

(6) Precision [3]

OP07

TS512

TS514

(7) LED Driver (Power Logic) [11]

STFPC311

STP04CM596

STP08C596

(8) High Voltage [7]

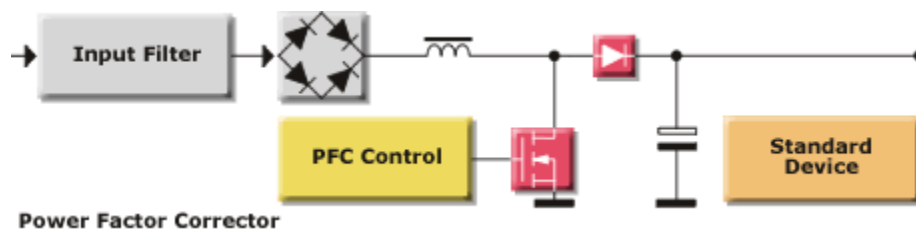
BF420

BF421

MMBTA42

功率因素修正(Power Factor Corrector)

Power Factor Correction (PFC) allows power distribution to operate at its maximum efficiency. Active PFC is able to generate a power factor of over 95%. The block diagram facilitates your selection among a wide choice of recommended applicable products.



1 PFC Control

(1) PFC Controllers [1]

[L4981](#)

(2) PFC Controllers [2]

[L6561](#)

[L6562](#)



(1) High Voltage N Channel [66]

[STB11NM80](#)

[STB12NK80Z](#)

[STB12NK80Z-S](#)

(2) Low Voltage N Channel [241]

[2N7000](#)

[2N7002](#)

[STB100NF03L-03](#)

(3) Medium Voltage N Channel [218]

[IRF620](#)

[IRF630](#)

[IRF630M](#)



Ultrafast 800V, 1000V and 1200V [41]

[BYT08P](#)

[BYT08PI-1000](#)

[BYT12P](#)

4 Standard Device

(1) 200W Transil [2]

SM2T

SM2T3V3A

(2) 400W Transil [3]

BZW04

SMAJ

SMTY18AM

(3) 600W Transil [7]

BZW06

P6KE

SM6HT

(4) 1500W Transil [8]

1.5KE

1N5908

LNBTVSx-22xx

(5) 5000W Transil [2]

BZW50

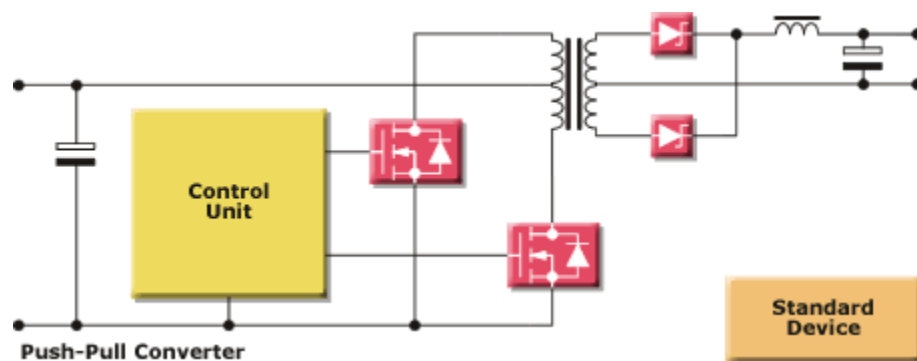
LDP24A

(6) Precision [3]

OP07
TS512
TS514
(7) LED Driver (Power Logic) [11]
STFPC311
STP04CM596
STP08C596
(8) High Voltage [7]
BF420
BF421
MMBTA42

推挽转换器(Push-Pull Converter)

Push-pull converters are mainly used in low input voltage DC to DC and DC to AC conversion. The block diagram facilitates your selection among a wide choice of recommended applicable products.



1 Control Unit

Synchronous Rectification Controllers [3]

[SG2525](#)

[SG3524](#)

[SG3525](#)



Low Voltage N Channel [241]

[2N7000](#)

[2N7002](#)

[STB100NF03L-03](#)



Ultrafast 200V, 300V and 400V [79]

[BYT01](#)

[BYT03](#)

[BYT08](#)

4 Standard Device

(1) 200W Transil [2]

[SM2T](#)

[SM2T3V3A](#)

(2) 400W Transil [3]

[BZW04](#)

[SMAJ](#)

[SMTY18AM](#)

(3) 600W Transil [7]

[BZW06](#)

[P6KE](#)

[SM6HT](#)

(4) 1500W Transil [8]

[1.5KE](#)

[1N5908](#)

[LNBTVSx-22xx](#)

(5) 5000W Transil [2]

[BZW50](#)

[LDP24A](#)

(6) High Voltage [7]

[BF420](#)

[BF421](#)

[MMBTA42](#)

6 Control Unit

(1) ST7 - 8-bit Microcontrollers [37]

[ST72321AR6](#)

[ST72321AR7](#)

[ST72321J7](#)

(2) uPSD - 8-bit Microcontrollers [27]

[UPSD3212A](#)

[UPSD3212C](#)

[UPSD3212CV](#)

7 Supervision

(1) TIMEKEEPER [21]

[M440T1MV](#)

[M48T02](#)

[M48T08](#)

(2) Serial Real-Time Clocks [15]

[M41ST84W](#)

[M41ST85W](#)

[M41ST87W](#)

(3) ZEROPOWER [17]

[M48Z02](#)

[M48Z08](#)

[M48Z12](#)

8 Standard Device

(1) High Temperature [2]

[LM2902H](#)

[LM2904WH](#)

(2) Industry Standard [52]

[LM119](#)

[LM139](#)

[LM193](#)

(3) Video Driver [32]

[TSH10](#)

[TSH11](#)

[TSH110](#)