PSU GUIDE H2-2022

PSU stands for **POWER SUPPLY UNIT** and plays a decisive and vital role in every PC configuration since it is „the heart“ of your PC.

The installed components of your PC have different levels of power (electricity) consumption, voltages, efficiencies and connectors which are managed & serviced by the **POWER SUPPLY UNIT.**

Therefore, it is important to choose the right **POWER SUPPLY UNIT** for your PC, based on the intended applications to be run.

Applications could include: Gaming, mining, workstation/servers, office PCs, home PCs, POS systems, etc…

POWER SUPPLY UNITs come in different formats, pending on the chassis format they are to be installed into. Most popular ones include:

- **ATX** ➔
  Size: 140 mm (160mm) x 150 mm x 86 mm
  Wattages: 350W – 1450W

- **SFX** ➔
  Size: 125 mm x 100 mm x 64 mm
  Wattages: 250W –650W

- **TFX** ➔
  Size: 175 mm x 85mm x 64 mm
  Wattages: 250W – 400W

- **External Power Adapter**
  Wattages: 85W & 120W

TFX format

SFX format

ext. format

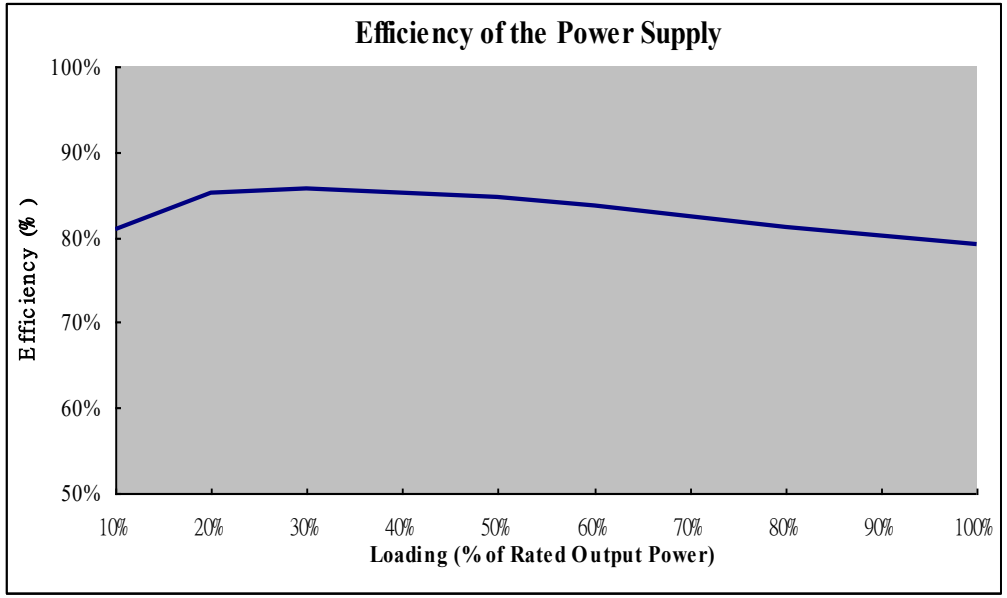
ATX format

EFFICIENCY DEFINITION:

Products are defined as “EFFICIENT”, if they have 80% or more energy efficiency at 20%, 50% and 100% load and a power factor of at least 0.9 at 100% load.

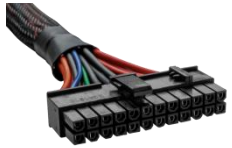
ADVANTAGE:

Pending on the efficiency level of the product, 20% or less electric energy is dissipated/lost in form of heat at specified load levels thereby reducing electricity use/consumption and resulting in much cheaper/lower bills, not to oversee the environmental advantages.



EFFICIENCY LEVELS:

Percentage of rated load	10%	20%	50%	100%
80 Plus		80%	80%	80%
80 Plus Bronze		82%	85%	82%
80 Plus Silver		85%	88%	85%
80 Plus Gold		87%	90%	87%
80 Plus Platinum		90%	92%	89%
80 Plus Titanium	90%	92%	94%	90%



24PIN➔ Main power connector for motherboards (20 + 4 PINs ATX)

4PIN 12V ➔ CPU power connector (P4 power connector) ATX 12V power connectors on motherboards. For most computers, you will just need to connect a single 4 pin connector.

8PIN EPS (4+4) 12V ➔ A hybrid of the 4 PIN ATX12V and EPS 12V connectors that can be split in half or combined to accommodate either the EPS 12V Socket or the ATX 12V socket. Provides additional power to the CPU.

6PIN PCIe➔ PCI Express power cable used to power GPUs/graphic cards with higher power demand.

8PIN PCIe (6+2)➔ PCI Express power cable used to power premium GPUs/graphic cards with high power demand.

Molex ➔ power connector for IDE HDDs & ODDs. Although old standard, MOLEX can be hijacked with adapters to provide SATA, 8PIN PCIe or 8PIN EPS 12V additional connectors.

SATA➔ Serial-ATA power cable connectors for SATA HDDs/SSDs and ODDs

Floppy ➔FFD for floppy drives. Basically not required anymore.

NOTE:
the amount and types of connectors on a PSU determine the amount and type of mainboards, add-on cards and peripherals that can be installed and what technology is compatible.

CHIEFTRONIC -powered by **CHIEFTEC**

PERFORMANCE POWER SUPPLIES

DESIGNER FAN GRILL
JAPANESE CAPACITORS
MAXIMUM EFFICIENCIES
ACCESSORIES BAG INSIDE
DOUBLE FWD. PCB TECHNOLOGY
xTRA LONG, BLACK & FLAT CABLES
MAXIMUM PROTECTION FEATURES
NON-AUDIBLE BALL & FDB-BEARING FANS
BUILT FOR GAMING & ABSOLUTE HIGH PERFORMANCE

PowerPlay PLATINUM (PERFORMANCE) series

Models: GPU-850FC & GPU-1050FC

Unique Selling Points:

- GAMING/HIGH PERFORMANCE
- 80PLUS PLATINUM
- JAPANESE CAPS.
- RETAIL (incl. Pwr cord + accessories)
- 100% MODULAR
- 14cm FDB (silent) FAN
- Security features: UVP, OVP, SCP, OPP, OCP, OTP, AFC & SIP
- LLC full bridge resonant design
- DC to DC technology
- +12V Single Rail technology

Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
GPU-850FC	1	9	3	x	x	6	2	1
GPU-1050FC	1	9	3	x	x	8	2	1

PowerPlay GOLD (PERFORMANCE) series

Models: GPU-550FC, GPU-650FC & GPU-750FC

Unique Selling Points:

- GAMING/HIGH PERFORMANCE
- 80PLUS GOLD
- JAPANESE CAPs.
- RETAIL (incl. Pwr cord + accessories)
- 100% MODULAR
- 14cm FDB (silent) FAN
- Security features: UVP, OVP, SCP, OPP, OCP, OTP, AFC & SIP
- LLC full bridge resonant design
- DC to DC technology
- +12V Single Rail technology

Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
GPU-550FC	1	6	3	x	x	2	1	1
GPU-650FC	1	9	3	x	x	4	1	1
GPU-750FC	1	9	3	x	x	4	1	1

PowerUP GOLD (PERFORMANCE) series

Models: GPX-550FC, GPX-650FC, GPX-750FC & GPX-850FC

<u>Unique Selling Points:</u>

- GAMING/HIGH PERFORMANCE
- 80PLUS GOLD
- JAPANESE CAPs.
- RETAIL (incl. Pwr cord + accessories)
- 100% MODULAR
- 14cm FDB (silent) FAN
- Security features: UVP, OVP, SCP, OPP, OCP, OTP, AFC & SIP
- LLC full bridge resonant design
- DC to DC technology
- +12V Single Rail technology

Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
GPX-550FC	1	6	3	x	x	2	2	1
GPX-650FC	1	9	3	x	x	2	2	1
GPX-750FC	1	9	3	x	x	4	2	1
GPX-850FC	1	9	3	x	x	6	2	1

STEELPOWER (PERFORMANCE)series

Models: GPX-550FC, GPX-650FC, GPX-750FC & GPX-850FC

Unique Selling Points:

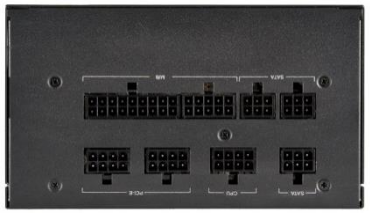
- GAMING/HIGH PERFORMANCE
- 80PLUS GOLD
- JAPANESE CAPs.
- RETAIL (incl. Pwr cord + accessories)
- 100% MODULAR
- 12cm FDB (silent) FAN
- Security features: UVP, OVP, SCP, OPP, OCP, OTP, AFC & SIP
- LLC half bridge resonant design
- DC to DC technology
- +12V Single Rail technology

Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
BDK-550FC	1	6	3	x	x	2	2	1
BDK-650FC	1	6	3	x	x	4	2	1
BDK-750FC	1	6	3	x	x	4	2	1

PERFORMANCE POWER SUPPLIES

QUALITY CAPACITORS
MAXIMUM EFFICIENCIES
ACCESSORIES BAG INSIDE
DOUBLE FWD. PCB TECHNOLOGY
xTRA LONG, BLACK & FLAT CABLES
MAXIMUM PROTECTION FEATURES
NON-AUDIBLE BALL & FDB-BEARING FANS
BUILT FOR GAMING & ABSOLUTE HIGH PERFORMANCE

POLARIS (PERFORMANCE) series



Models: PPS-550FC, PPS-650FC, PPS-750FC, PPS-850FC, PPS-1050FC & PPS-1250FC*(new)

Unique Selling Points:

- GAMING/HIGH PERFORMANCE
- 80PLUS GOLD
- RETAIL (incl. Pwr cord + accessories)
- 100% MODULAR
- 14cm BALL BEARING (silent) FAN
- SECURITY FEATURES: UVP, OVP, SCP, OPP, OCP, OTP, AFC & SIP
- LLC Half-Bridge converter with DC-to-DC technology
- +12V Single Rail technology

Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
PPS-550FC	1	6	3	x	x	2	2	1
PPS-650FC	1	6	3	x	x	4	2	1
PPS-750FC	1	8	3	x	x	4	2	1
PPS-850FC	1	12	4	x	x	4	2	x
PPS-1050FC	1	12	6	x	x	6	2	x
PPS-1250FC	1	12	6	x	x	6	4	x

CORE (PERFORMANCE) series

Models: BBS-500S, BBS-600S & BBS-700S

Unique Selling Points:

- GAMING/HIGH PERFORMANCE
- 80PLUS GOLD
- RETAIL (incl. Pwr cord + accessories) & BULK (excl. Pwr cord & accessories)
- DIRECT CABLES
- 12cm ball bearing (silent) fan
- Security features: UVP, OVP, SCP, OPP, AFC & SIP
- LLC half bridge resonant design & DC to DC technology
- +12V Single Rail technology

Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
BBS-500S	1	4	3	x	x	1	1	1
BBS-600S	1	6	3	x	x	2	1	1
BBS-700S	1	6	3	x	x	2	2	1

PROTON (PERFORMANCE) series

Models (CABLES): BDF-400S, BDF-500S & BDF-600S
Models (MODULAR): BDF-650C, BDF-750C, BDF-850C & BDF-1000C

Unique Selling Points:

- GAMING/HIGH PERFORMANCE
- 80PLUS BRONZE
- RETAIL (incl. Pwr cord + accessories)
- 100% MODULAR for all „**C**“ **models**
- DC-2-DC technology
- Xtra long & flat uni-color cables
- 14cm ball bearing (silent) fan
- Security features: UVP, OVP, SCP, OPP, OCP, OTP, AFC & SIP

Model	24PIN	SATA	Molex	6PIN PCIe	8PIN 12V	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
BDF-400S	1	3	3	1	X	x	1	x
BDF-500S	1	6	3	x	x	2	1	x
BDF-600S	1	6	3	x	x	2	1	x
BDF-650**C**	1	6	3	x	x	4	1	1
BDF-750**C**	1	6	3	x	x	4	1	1
BDF-850**C**	1	9	3	x	1	6	1	1
BDF-1000**C**	1	9	3	x	1	6	1	1

SILICON (PERFORMANCE) series

Models: SLC-650C, SLC-750C, SLC-850C & SLC-1000C

Unique Selling Points:

- GAMING/HIGH PERFORMANCE
- 80PLUS BRONZE
- RETAIL (incl. Pwr cord + accessories)
- 100% MODULAR
- DC-2-DC technology
- Xtra long & flat uni-color (black) cables
- 14cm ball bearing (silent) fan
- Security features: UVP, OVP, SCP, OPP, OCP, OTP, AFC & SIP

Model	24PIN	SATA	Molex	6PIN PCIe	8PIN PCIe (6+2)	8PIN 12V	8PIN EPS (4+4)	Floppy
SLC-650C	1	6	3	x	4	x	1	1
SLC-750C	1	6	3	x	4	x	1	1
SLC-850C	1	9	3	x	6	1	1	1
SLC-1000C	1	9	3	x	6	1	1	1

A – 90 (PERFORMANCE) series

Models: GDP-550C, GDP-650C & GDP-750C

Unique Selling Points:

- GAMERS/ENTHUSIASTS
- 90% EFFICIENCY @230V (equivalent to 80PLUS GOLD)
- RETAIL (incl. Pwr cord + accessories)
- SEMI MODULAR
- 14cm (silent) Fan (+5V addressable)
- Security features: UVP, OVP, SCP, OPP, OCP, OTP, AFC & SIP
- Double forward design & DC to DC technology
- +12V Single Rail technology

Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
GDP-550C	1	6	3	x	x	2	1	1
GDP-650C	1	6	3	x	x	2	1	1
GDP-750C	1	8	3	x	x	4	1	1

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PHOTON GOLD (RGB) series

Models: GDP-650C-RGB & GDP-750C-RGB

Unique Selling Points:

- GAMERS/ENTHUSIASTS
- 90% EFFICIENCY @230V (equivalent to 80PLUS GOLD)
- RETAIL (incl. Pwr cord + accessories)
- SEMI MODULAR
- 14cm (RGB) (silent) Fan (+5V addressable)
- Security features: UVP, OVP, SCP, OPP, OCP, OTP, AFC & SIP
- Double forward design & DC to DC technology
- +12V Single Rail technology
- RGB: supports all renowned RGB lightening synchronization systems such as ASUS™ AURA SYNC, MSI™ MYSTIC LIGHT SYNC, ASROCK™ POLYCHROME SYNC and GIGABYTE™ RGB FUSION.

Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
GDP-650C-RGB	1	6	3	x	x	4	1	1
GDP-750C-RGB	1	8	3	x	x	4	1	1

PHOTON (RGB) series

Models: CTG-650C-RGB & CTG-750C-RGB

Unique Selling Points:

- GAMERS/ENTHUSIASTS
- 85% EFF@230V (equivalent to 80PLUS BRONZE)
- RETAIL (incl. Pwr cord + accessories)
- SEMI MODULAR
- 12cm (RGB) (silent) Fan (+5V addressable)
- Security features: UVP, OVP, SCP, OPP, AFC & SIP
- RETAIL
- Double Forward Design with +3.3V magnetic amplification
- +12V Single Rail Technology
- RGB: supports all renowned RGB lightening synchronization systems such as ASUS™ AURA SYNC, MSI™ MYSTIC LIGHT SYNC, ASROCK™ POLYCHROME SYNC and GIGABYTE™ RGB FUSION.

Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
CTG-650C-RGB	1	6	4	x	x	4	1	2
CTG-750C-RGB	1	6	4	x	x	4	1	2

RETAIL POWER SUPPLIES

REAL POWER
RETAIL & BULK
QUALITY COMPONENTS
MAXIMUM EFFICIENCIES
EYE CATCHING RETAIL PACKING
THERMAL BOARD TECHNOLOGY
+12V SINGLE RAIL TECHNOLOGY
+3.3V MAGNETIC AMPLIFICATION
LLC HALF BRIDGERESONANT DESIGN PCB
MAINSTREAM GAMING, HOME & OFFICE

TASK (RETAIL) series

Models: TPS-400S, TPS-500S, TPS-600S & TPS-700S

Unique Selling Points:

- HIGH VALUE HOME/GAMING & OFFICE SYSTEMS
- 80PLUS BRONZE
- DIRECT CABLES
- RETAIL & BULK (incl. Pwr cord + accessories) & BULK (excl. Pwr cord & accessories)
- DIRECT CABLES (Xtra long MB & CPU cables - 650mm)
- +12V Single Rail Technology
- 12cm ball bearing (silent) fan
- Double forward design & DC to DC technology + Thermal board
- Security features: : UVP, OVP, SCP, OPP, OTP, AFC & SIP

Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
TPS-400S	1	5	3	x	x	1	1	x
TPS-500S	1	5	3	x	x	1	1	x
TPS-600S	1	5	3	x	x	2	1	x
TPS-700S	1	6	3	x	x	2	1	x

ELEMENT (RETAIL) series

Models: ELP-350S, ELP-400S, ELP-500S, ELP-600S & ELP-700S

Unique Selling Points:

- HIGH VALUE HOME/GAMING & OFFICE SYSTEMS
- 85% EFF @230V (equivalent to 80PLUS BRONZE)
- DIRECT CABLES
- RETAIL & BULK (incl. Pwr cord + accessories) & BULK (excl. Pwr cord & accessories)
- Double Forward Design with +3.3V magnetic amplification
- +12V Single Rail Technology
- 12cm ball bearing (silent) fan
- Security features: UVP, OVP, SCP, OPP, AFC &SIP
- **ELP-600S** & **ELP-700S** with xtra long (650mm) **24PIN** & **EPS 12V** cables

Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
ELP-350S	1	3	2	x	x	x	1	1
ELP-400S	1	3	2	x	x	1	1	1
ELP-500S	1	3	2	x	x	1	1	1
ELP-600S	1	4	2	x	x	2	1	1
ELP-700S	1	6	2	x	x	2	1	1

A - 80 (RETAIL) series

Models: CTG-550C, CTG-650C & CTG-750C

Unique Selling Points:

- HIGH VALUE HOME/GAMING & OFFICE SYSTEMS
- 85% EFF @230V (equivalent to 80PLUS BRONZE)
- SEMI MODULAR
- RETAIL (incl. Pwr cord + accessories)
- Double Forward Design with +3.3V magnetic amplification
- +12V Single Rail Technology
- 12cm ball bearing (silent) fan
- Security features: UVP, OVP, SCP, OPP, AFC & SIP

Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
CTG-550C	1	6	4	x	x	2	1	2
CTG-650C	1	6	4	x	x	2	1	2
CTG-750C	1	6	4	x	x	2	1	2

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ECO (RETAIL) series

Models: GPE-400S, GPE-500S, GPE-600S & GPE-700S

Unique Selling Points:

- HIGH VALUE HOME/GAMING & OFFICE SYSTEMS
- 85% EFF @230V (equivalent to 80PLUS BRONZE)
- DIRECT CABLES
- RETAIL (incl. Pwr cord + accessories)
- Double Forward Design with +3.3V magnetic amplification
- +12V Single Rail Technology
- 12cm ball bearing (silent) fan
- Security features: UVP, OVP, SCP, OPP, AFC & SIP

Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
GPE-400S	1	4	2	x	x	x	1	x
GPE-500S	1	4	2	x	x	x	1	x
GPE-600S	1	6	2	x	x	2	1	x
GPE-700S	1	6	2	x	x	2	1	x

FORCE (RETAIL) series

Models: CPS-350S, CPS-400S, CPS-450S, CPS-500S, CPS-550S, CPS-650S & CPS-750S

Unique Selling Points:

- HIGH VALUE HOME/GAMING & OFFICE SYSTEMS
- 85% EFF @230V (equivalent to 80PLUS BRONZE)
- DIRECT CABLES
- RETAIL (incl. Pwr cord + accessories)
- Double Forward Design with +3.3V magnetic amplification
- +12V Single Rail Technology
- 12cm ball bearing (silent) fan
- Security features: UVP, OVP, SCP, OPP, AFC & SIP

Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
CPS-350S	1	4	2	x	x	x	1	x
CPS-400S	1	4	2	x	x	x	1	x
CPS-450S	1	4	2	x	1	x	1	x
CPS-500S	1	4	2	x	x	2	1	x
CPS-550S	1	4	2	x	x	2	1	x
CPS-650S	1	6	2	x	x	2	1	x
CPS-750S	1	6	2	x	x	2	1	x

SMART (RETAIL) series

Models: GPS-400A8, GPS-500A8, GPS-550A8, GPS-600A8, GPS-650A8 & GPS-700A8

Unique Selling Points:

- HIGH VALUE HOME/GAMING & OFFICE SYSTEMS
- 85% EFFICIENCY @230V (equivalent to 80PLUS BRONZE)
- DIRECT CABLES
- RETAIL (incl. Pwr cord + accessories) & BULK (excl. Pwr cord & accessories)
- Double forward design with +3.3V magnetic amplification
- +12V Single Rail Technology
- 12cm ball bearing (silent) fan
- Security features: UVP, OVP, SCP, OPP, AFC & SIP

Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
GPS-400A8	1	3	2	x	x	1	1	1
GPS-500A8	1	3	2	x	x	1	1	1
GPS-550A8	1	4	2	x	x	2	1	1
GPS-600A8	1	4	2	x	x	2	1	1
GPS-650A8	1	4	2	x	x	2	1	1
GPS-700A8	1	6	2	x	x	2	1	1

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OEM/BULK POWER SUPPLIES

REAL POWER
RETAIL & BULK
QUALITY COMPONENTS
MAXIMUM EFFICIENCIES
THERMAL BOARD TECHNOLOGY
+12V SINGLE RAIL TECHNOLOGY
+3.3V MAGNETIC AMPLIFICATION
LLC HALF BRIDGERESONANT DESIGN PCB
MAINSTREAM GAMING, HOME & OFFICE

SOLID (BULK/OEM) series

Models: GPP-400S, GPP-500S, GPP-600S & GPP-700S

Unique Selling Points:

- MAIN STREAM HOME & OFFICE
- 85% EFF @230V (equivalent to 80PLUS BRONZE)
- BULK (excl. Pwr cord & accessories)
- +12V Single Rail Technology
- XTRA long CPU and MB cables (650mm)
- 400W – 700W with 8PIN EPS (4+4)
- Security features: UVP, OVP, SCP, OPP, AFC & SIP
- Active PFC (PF 0,9)
- Thermal board

Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
GPP-400S	1	5	3	1	x	1	x	x
GPP-500S	1	5	3	1	x	1	x	x
GPP-600S	1	5	3	1	x	2	x	x
GPP-700S	1	6	3	1	x	2	x	x

iARENA-II (BULK/OEM) series

Models: GPA-350S8, GPA-400S8, GPA-450S8 & GPA-500S8

Unique Selling Points:

- MAIN STREAM HOME & OFFICE
- 85% EFF @230V (equivalent to 80PLUS)
- BULK (excl. Pwr cord & accessories)
- +12V Single Rail Technology
- 12cm ball bearing (silent) fan
- Security features: UVP, OVP, SCP, OPP, AFC & SIP
- Active PFC (PF 0,9)
- Thermal board

Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
GPA-350S8	1	3	2	x	x	x	1	1
GPA-400S8	1	3	2	x	x	1	1	1
GPA-450S8	1	3	2	x	x	1	1	1
GPA-500S8	1	3	2	x	x	1	1	1

iARENA-IV (BULK/OEM) series

Models: GPB-350S, GPB-400S, GPB-450S & GPB-500S

Unique Selling Points:

- MAIN STREAM HOME & OFFICE
- 85% EFF @230V (equivalent to 80PLUS BRONZE)
- BULK (excl. Pwr cord & accessories)
- +12V Single Rail Technology
- 12cm ball bearing (silent) fan
- Security features: UVP, OVP, SCP, OPP, AFC & SIP
- Active PFC (PF 0,9)
- Thermal board

Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PINEPS (4+4)	Floppy
GPB-350S	1	5	3	x	x	1	1	x
GPB-400S	1	5	3	x	x	1	1	x
GPB-450S	1	5	3	x	x	1	1	x
GPB-500S	1	5	3	x	x	1	1	x

VALUE (BULK/OEM) series

80 PLUS 230V EU

Models: APB-400B8 & APB-500B8

Unique Selling Points:

- MAIN STREAM HOME & OFFICE
- 80PLUS EU (WHITE)
- BULK (excl. Pwr cord & accessories)
- +12V Single Rail Technology
- 12cm ball bearing (silent) fan
- Security features: UVP, OVP, SCP, OPP, AFC & SIP
- Active PFC (PF 0,9)
- Thermal board

Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
APB-400B8	1	3	2	1	1	x	x	1
APB-500B8	1	3	2	1	1	x	x	1
APB-600B8	1	4	2	x	x	2	1	1
APB-700B8	1	4	2	x	x	2	1	1

iARENA-III (BULK/OEM) series

80+
230V only

Models: GPC-400S, GPC-500S, GPC-600S, & GPC-700S

Unique Selling Points:

- MAIN STREAM HOME & OFFICE
- 80% EFF @230V (equivalent to 80PLUS)
- BULK (excl. Pwr cord & accessories)
- +12V Single Rail Technology
- 12cm ball bearing (silent) fan
- Security features: UVP, OVP, SCP, OPP, AFC & SIP
- Active PFC (PF 0,9)
- Thermal board

Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
GPC-400S	1	4	2	x	x	x	1	x
GPC-500S	1	4	2	x	x	1	1	x
GPC-600S	1	6	2	x	x	2	1	x
GPC-700S	1	6	2	x	x	2	1	x

iARENA-I (BULK/OEM) series

Models: GPA-550S, GPA-600S, GPA-650S & GPA-700S

Unique Selling Points:

- MAIN STREAM HOME & OFFICE
- <80% EFF @230V
- BULK (excl. Pwr cord & accessories)
- +12V Single Rail Technology
- 12cm ball bearing (silent) fan
- Security features: UVP, OVP, SCP, OPP, AFC & SIP
- Active PFC (PF 0,9)
- Thermal board

Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
GPA-550S	1	4	2	x	x	2	1	1
GPA-600S	1	4	2	x	x	2	1	1
GPA-650S	1	6	2	x	x	2	1	1
GPA-700S	1	6	2	x	x	2	1	1

SFX POWER SUPPLIES

SFF (small form factor) solution

REAL Power
HIGH EFFICIENCIES
QUALITY CAPACITORS
RETAIL & BULK PACKING
DC – to – DC technology
+12V SINGLE RAIL Technology
THERMAL BOARD Technology
LLC HALF BRIDGE RESONANT DESIGN PCB
GMING, PERFORMANCE, HOME & OFFICE

SMART (SFX PERFORMANCE) series

Models: SFX-500GD-C

Unique Selling Points:

- GAMING/HIGH PERFORMANCE
- 80PLUS GOLD (SFX-500DG-C)
- RETAIL (incl. Pwr cord & accessories)
- +12V Single Rail Technology
- 8cm ball bearing (silent) fan
- Security features: UVP, OVP, SCP, OPP, OCP, OTP, AFC & SIP
- Thermal board
- Dedicated to SFF (small form factor) cases
- ATX 2.3 version

Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
SFX-500GD-C	1	4	2	x	x	2	1	x

SMART (SFX) series

Models: SFX-250VS, SFX-350BS & SFX-450BS

Unique Selling Points:

- MAIN STREAM HOME & OFFICE
- 85% EFF @230V (SFX-XXXVS/BS)
- BULK (excl. Pwr cord & accessories)
- +12V Single Rail Technology
- 8cm ball bearing (silent) fan
- Security features: UVP, OVP, SCP, OPP, OCP, OTP, AFC & SIP
- Thermal board
- Dedicated to SFF (small form factor) cases
- ATX 2.3 version

Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
SFX-250VS	1	2	2	X	x	x	1	1
SFX-350BS	1	2	2	x	x	x	1	1
SFX-450BS	1	4	2	x	x	1	1	1
SFX-500GD-C	1	4	2	x	x	2	1	x

SMART (BFX) series

Models: BFX-350BS & BFX-450BS

Unique Selling Points:

- MAIN STREAM HOME & OFFICE
- 80PLUS BRONZE
- BULK (excl. Pwr cord & accessories)
- +12V Single Rail Technology
- 8cm ball bearing (silent) fan
- Security features: UVP, OVP, SCP, OPP, OCP, OTP, AFC & SIP
- DC to DC technologie
- Dedicated to SFF (small form factor) cases
- ATX 2.3 version

Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
BFX-350BS	1	3	2	x	x	1	1	1
BFX-450BS	1	3	2	x	x	2	1	1

COMPACT (SFX PERFORMANCE) series

Models: CSN-450C, CSN-550C & CSN-650C

Unique Selling Points:

- GAMING/HIGH PERFORMANCE
- 80PLUS GOLD certified
- RETAIL (incl. Pwr cord & accessories)
- +12V Single Rail Technology
- 8cm ball bearing (silent) fan
- Security features: UVP, OVP, SCP, OPP, OCP, OTP, AFC & SIP
- Active PFC (PF 0,9)
- Thermal board
- Dedicated to SFF (small form factor) cases
- ATX 2.3 version

Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
CSN-450C	1	6	3	x	x	2	1	1
CSN-550C	1	6	3	x	x	2	1	1
CSN-650C	1	6	3	x	x	2	1	1

SMART (TFX) series

Models: GPF-300P, GPF-350P & GPF-400P

Unique Selling Points:

- MAIN STREAM HOME & OFFICE
- 80PLUS BRONZE
- 85% EFF @230V ➔ GPF-350P & GPF-400P
- BULK (excl. Pwr cord & accessories)
- +12V Single Rail Technology
- 8cm ball bearing (silent) fan
- Security features: UVP, OVP, SCP, OPP, AFC & SIP
- Thermal board
- Dedicated to SFF (small form factor) cases
- ATX 2.3 version

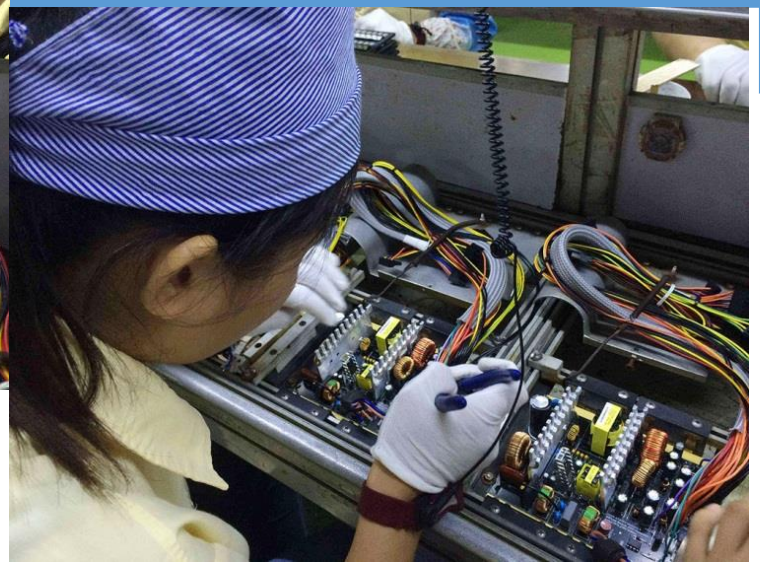
Model	24PIN	SATA	Molex	4PIN 12V	6PIN PCIe	8PIN PCIe (6+2)	8PIN EPS (4+4)	Floppy
GPF-300P	1	4	2	x	x	x	1	1
GPF-350P	1	4	2	x	x	x	1	1
GPF-400P	1	4	2	x	x	x	1	1

PRODUCT REAEARCH & DEVELOPEMENT

1. pre-processing

2. plug in components

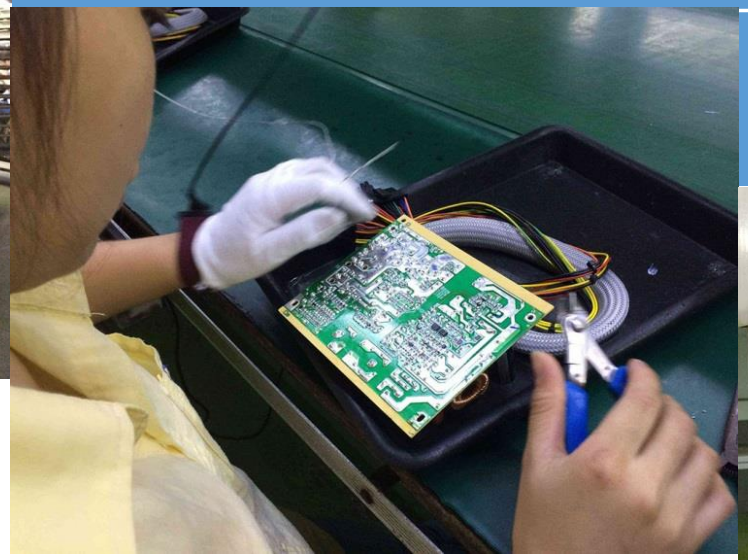
3. Initial check



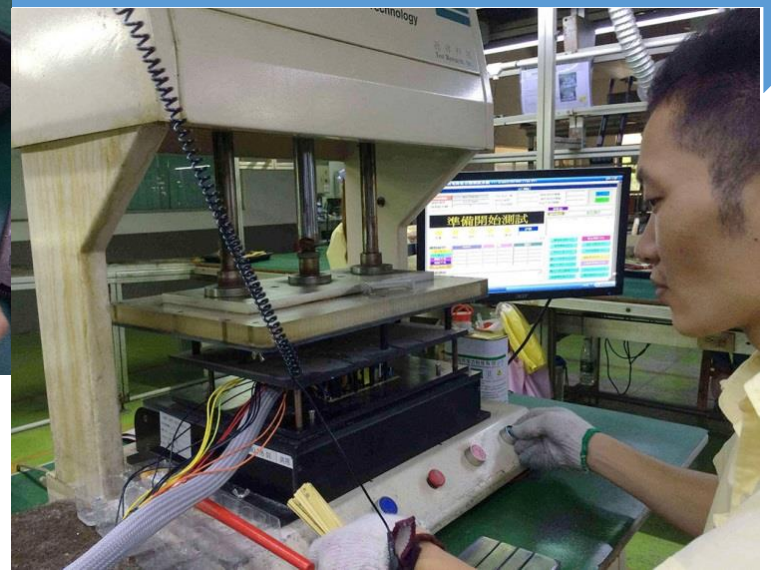
Product developement / R&D

4. wave-soldering process

5. check the soldering quality

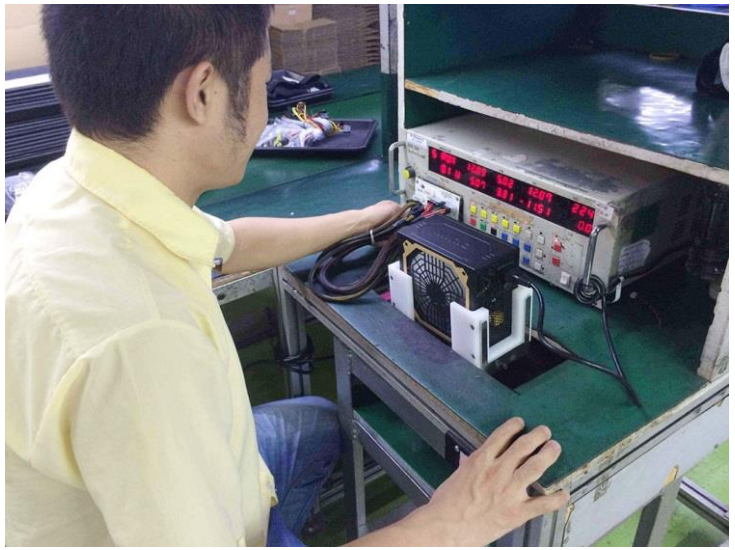


6. in circuit test



Product developement / R&D

10. Test after assembly

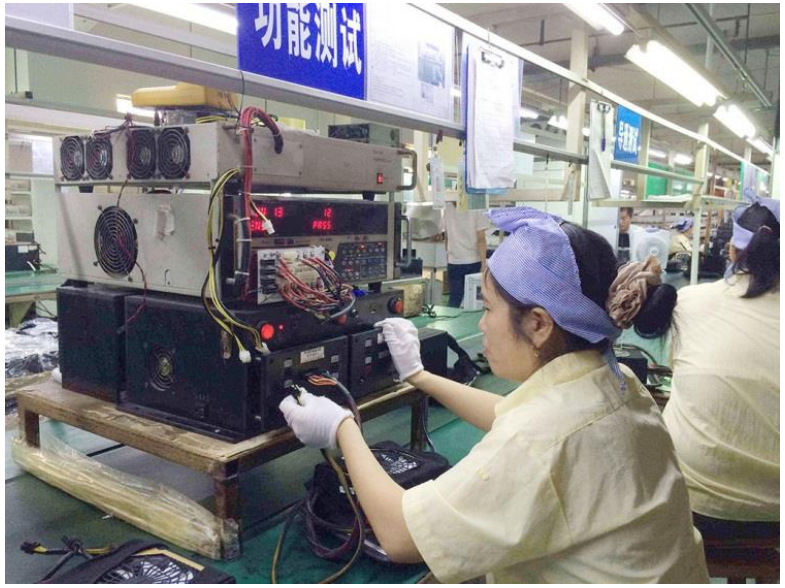


11. burn-in test

12. HI-POT test

Product developement / R&D

13. function test



14. cable test

15. ATE test

Product developement / R&D

16. appearance check

17. packaging

18. out-going quality control

QUALITY CONTROL

QUALITY CONTROL

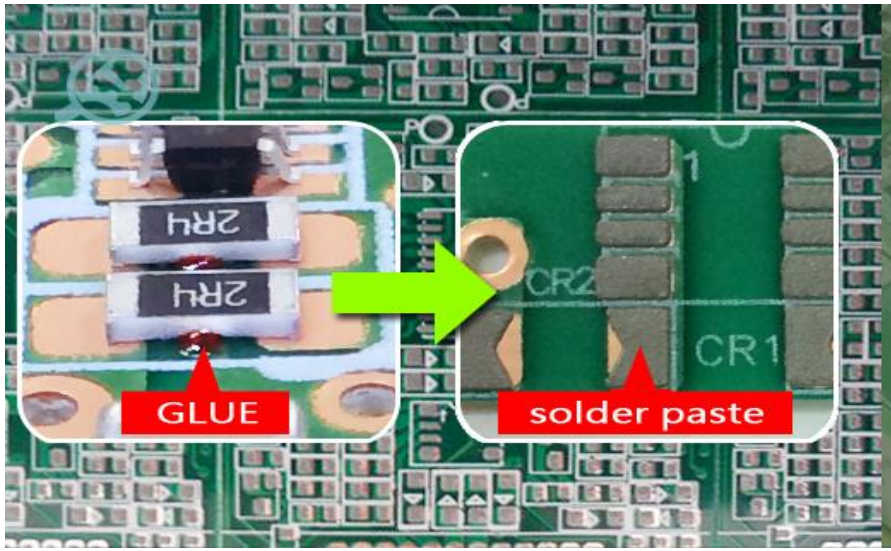
This powerful feature saves time and reduces significantly, human operations errors which in turn decreases failure rate due to improper tests.

QUALITY CONTROL

Brand new soldering machine launched in 2014 to ensure clean soldering processes which increase longevity of components and related solutions

The new BURN-IN room which is used to stress-test PSUs until burning point to establisch max. values correctly.

QUALITY CONTROL



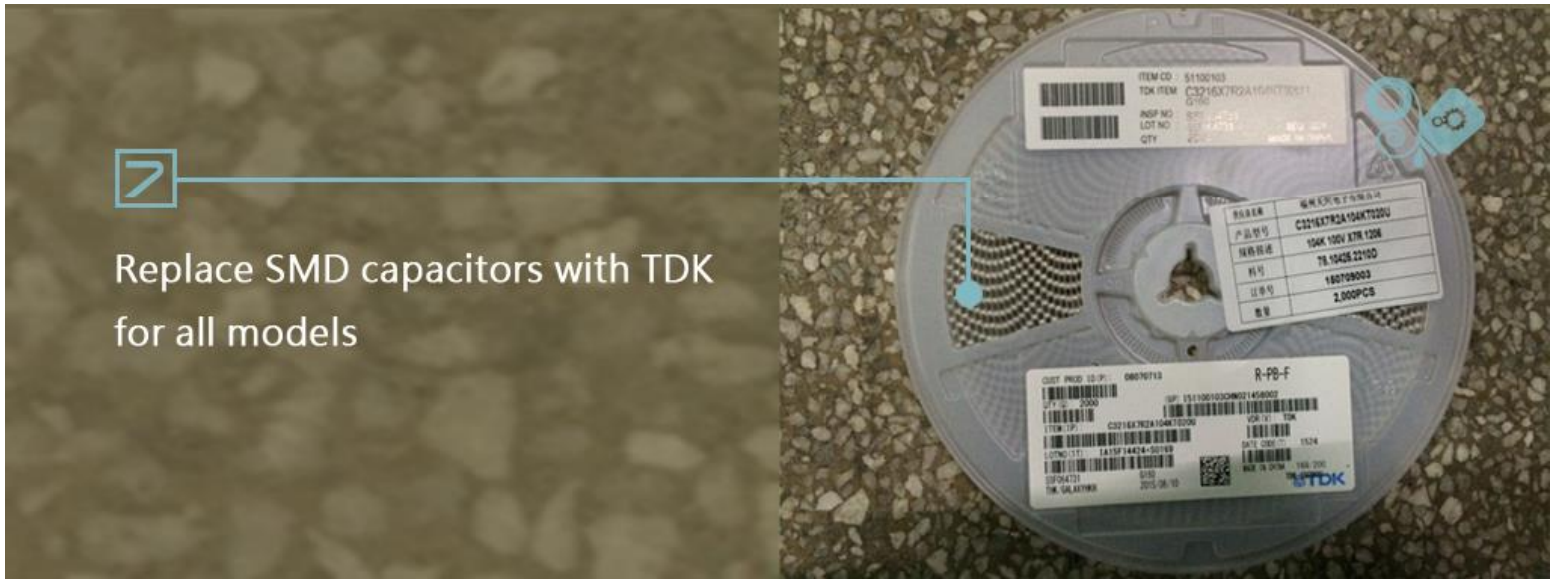
Brand new soldering paste processes for daughter mainboards to enhance cleaner and more dependent soldering points.

The glue is a relevant aspect of the PSU so that anti water, dust and insulation glue is now implemented to enhance functionality further.

QUALITY CONTROL

The vibration test is run on every single unit at the end of the production line to further ensure all quality standards are met.

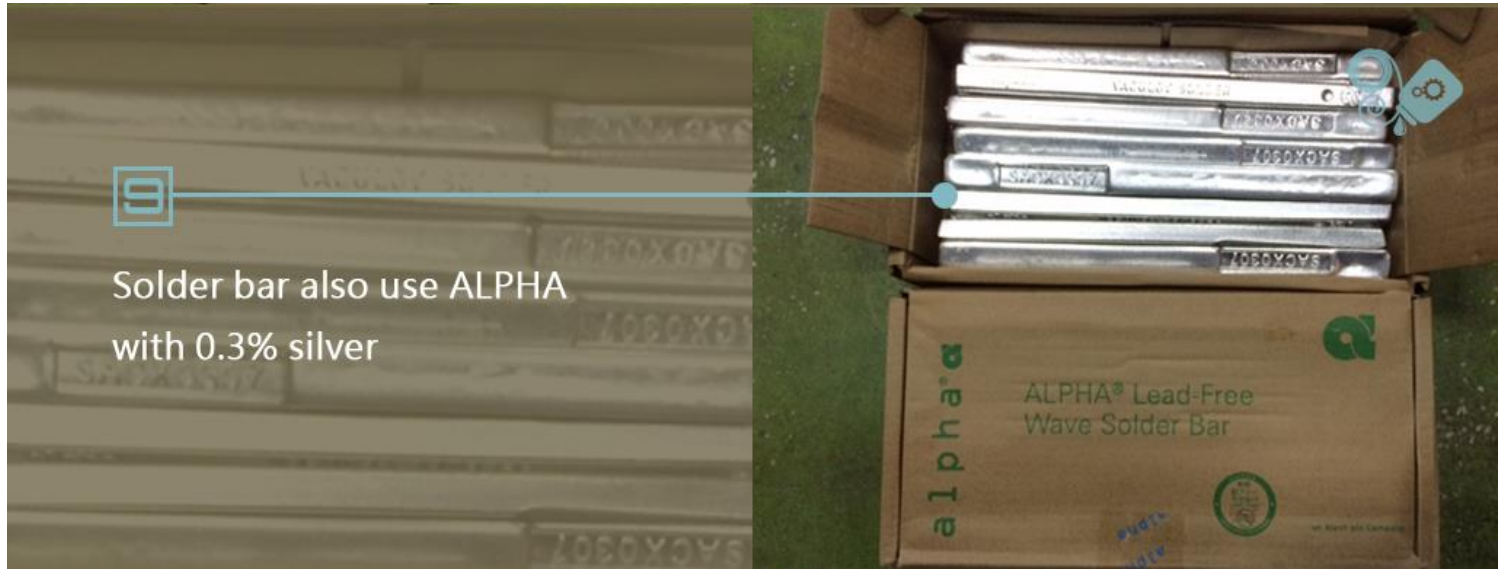
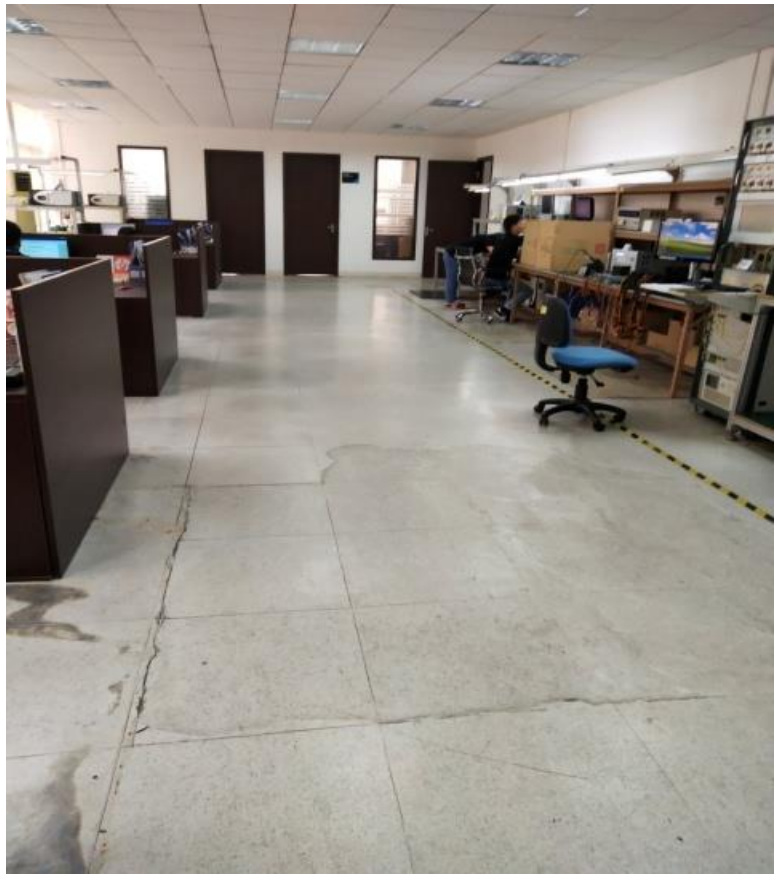
SMD capacitors have been replaced with TDKs to boost longevity and ensure additional MTBF.



QUALITY CONTROL

Both soldering spray and solder bars have been upgraded to very renowned brand ALPHA which ensures highest quality soldering.

Solder bars with 0,3% silver to ensure long-term soldering results and lowest possible insulation.



CHIEFTEC QUALITY CONTROL CENTER