AMR DP-777 Internal Photos (Uncensored)

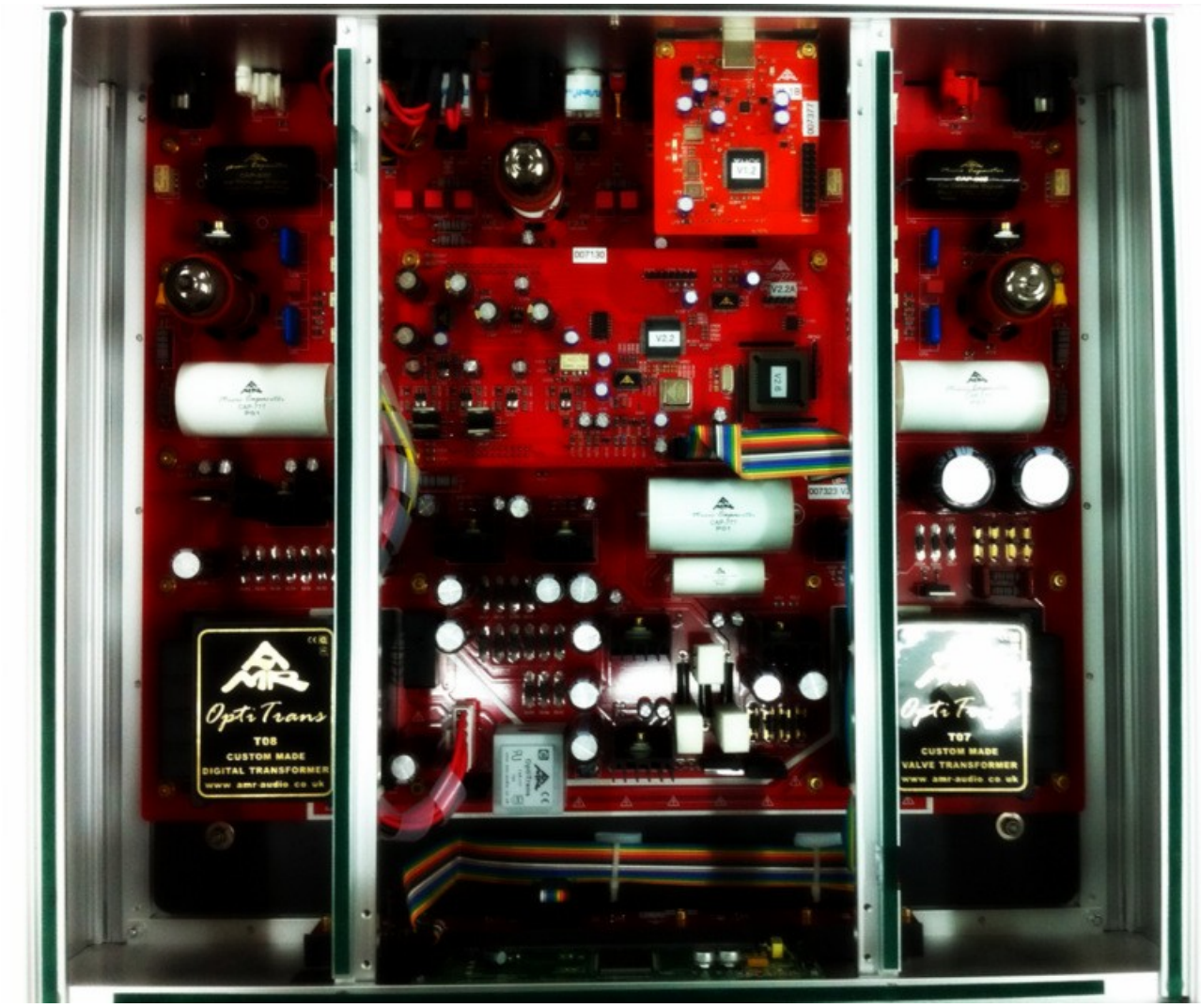
Submitted by DM on Wed, 01/04/2012 - 07:46

Happy New Year 2012!

Now my AMR DP-777 is pretty much broken in and gives a very consistent and magical performance each and every day now.

Before I post my detail comments on sound, during the holidays I opened up the DP-777 and took some photos, I thought some of you may find them interesting.

I took them with my iPhone, so the photo quality is not the best.
My system with the AMR DP-777:



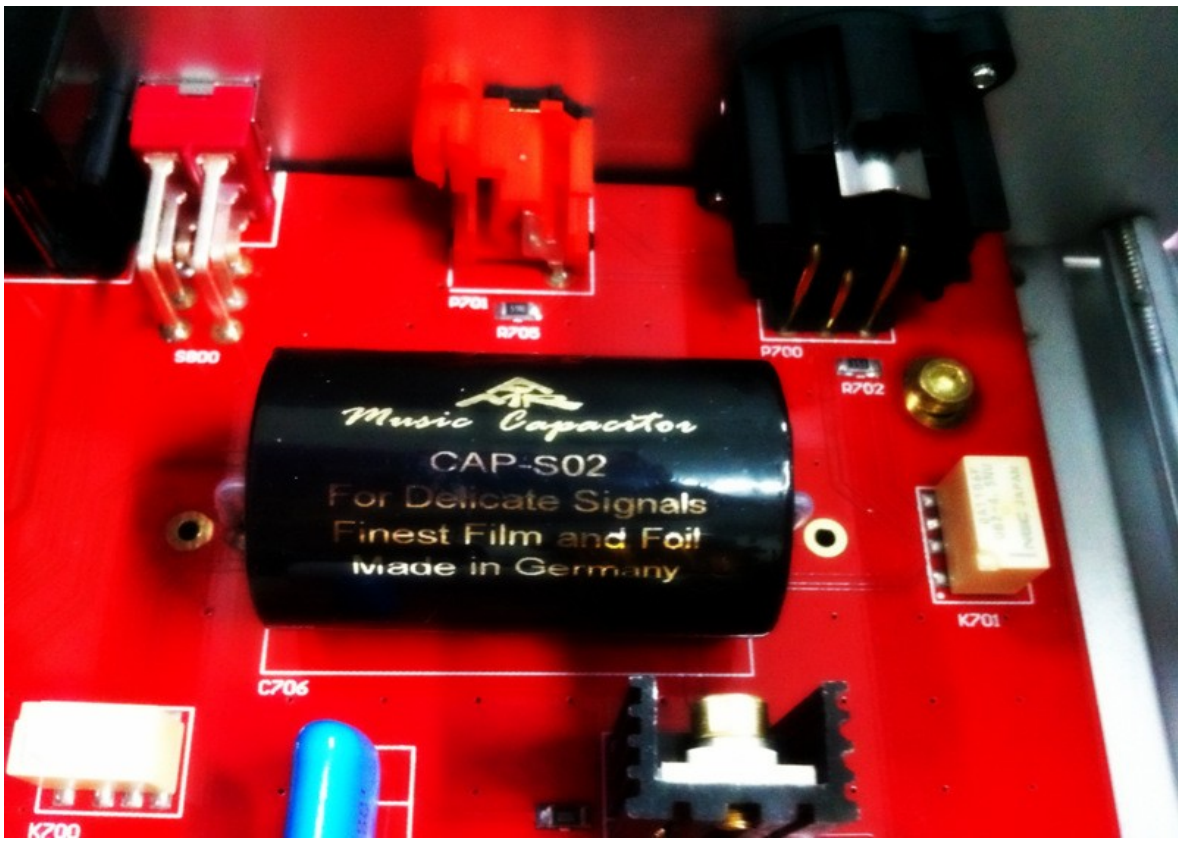
Here is the internal shot of the DP-777. The bottom section is all power supply; in the middle is the Digital Engine; top part is the Digital Inputs; middle top right is the Asynch USB module.

Left and right are the tube analogue stages, a dual-mono construction (haven't seen many dual mono construction at this price point!)

Nowadays, when you open up a US$7k-9k DAC, it's more like a good sound card in a box, there is no audiophile component inside. Is it because we are on the CAS road, hence audiophile/quality components are not needed?

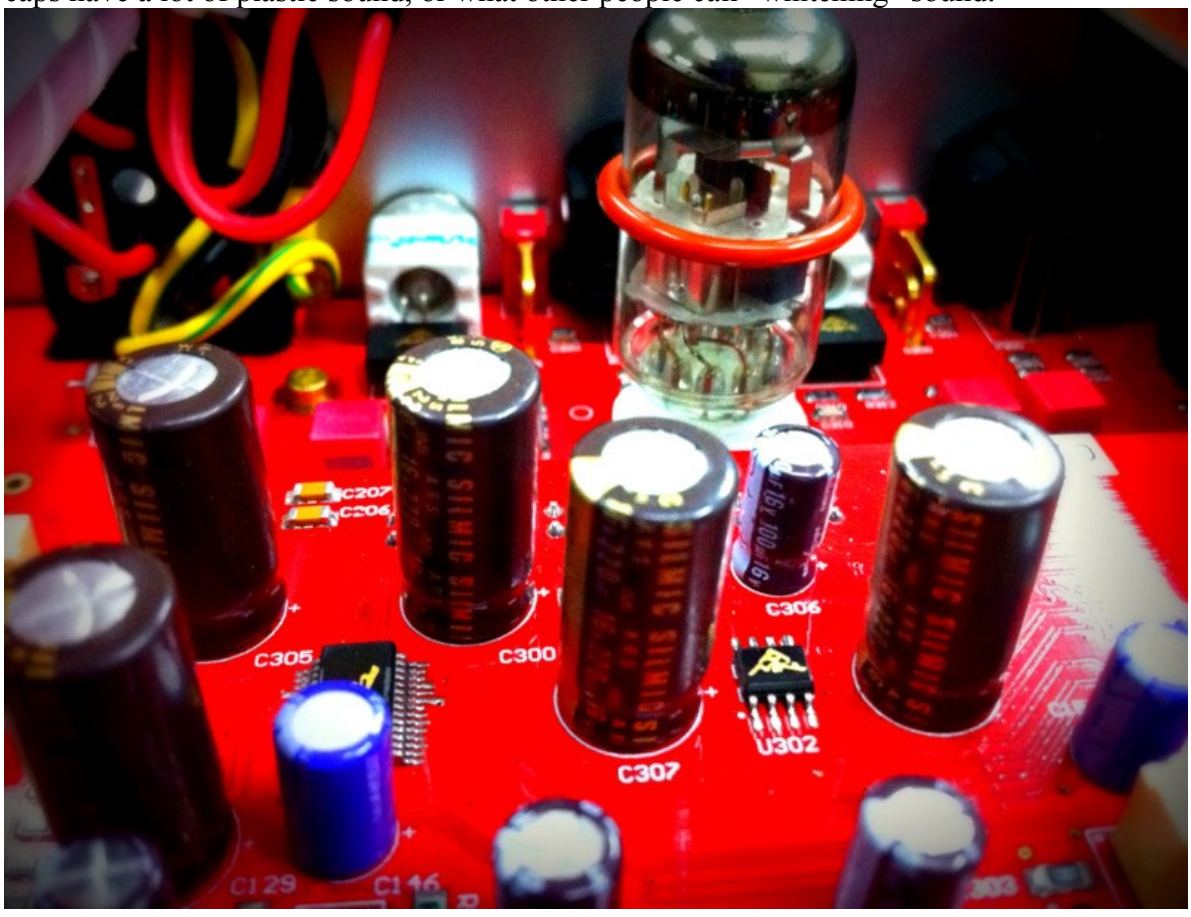
Well, from the digital side, audiophile component doesn't really help much (sometimes they will even make the sound worst then before). However， 50% of a DAC is the analogue section, which is just like an analogue pre-amp. Although the use of audiophile components do not guarantee good sound, it is difficult to achieve good sound without audiophile components.

Let's see what the AMR DP-777 has:



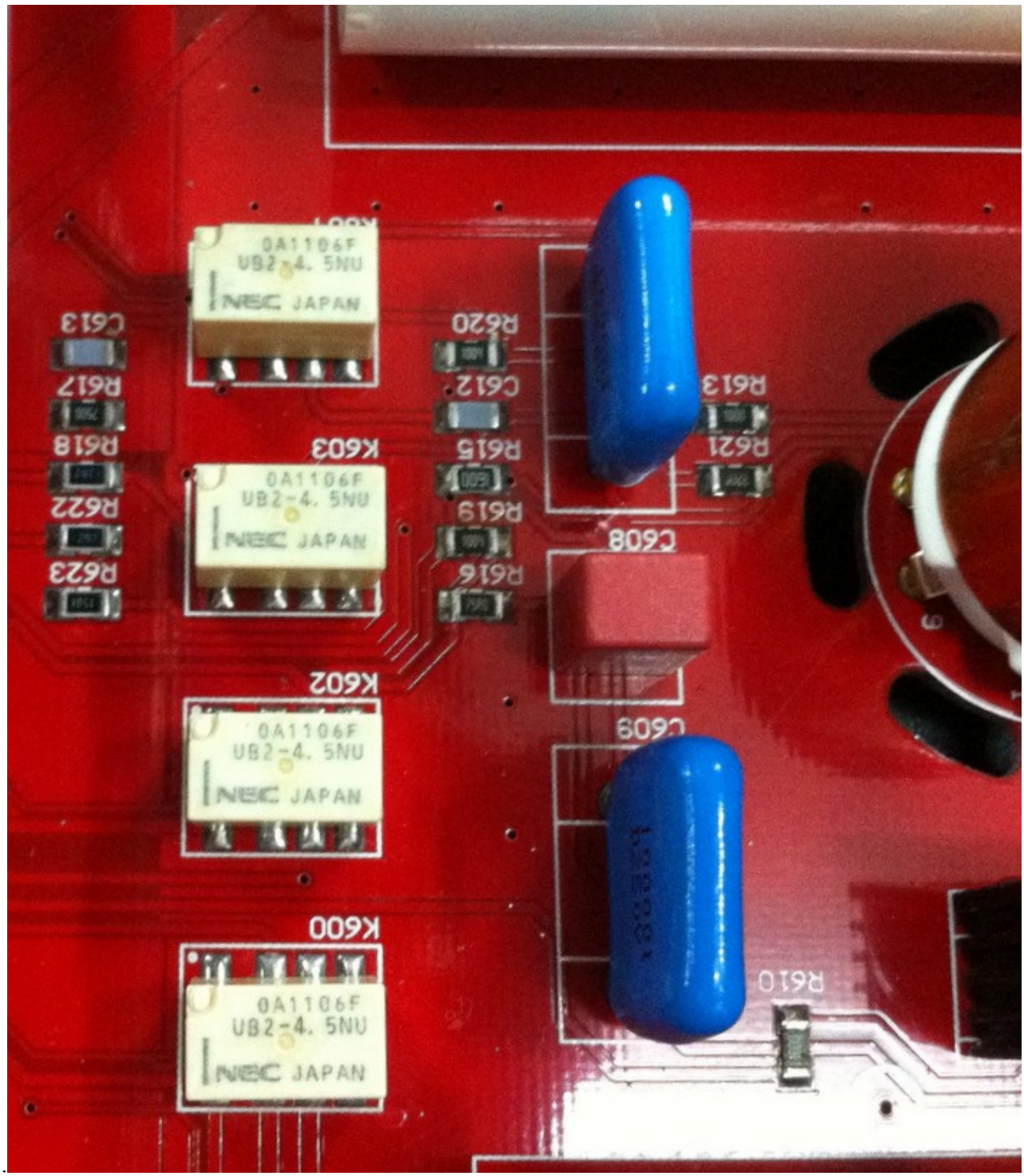
This is the output caps, the dealer told me the retail price for a pair of those is around 100euro, at this price point, I guess they are Mundorf SUPREME Silver/Gold.

This cap is really nice, very musical with a lot of details. No plastic sound at all. Many audiophile caps have a lot of plastic sound, or what other people call “whitening” sound.

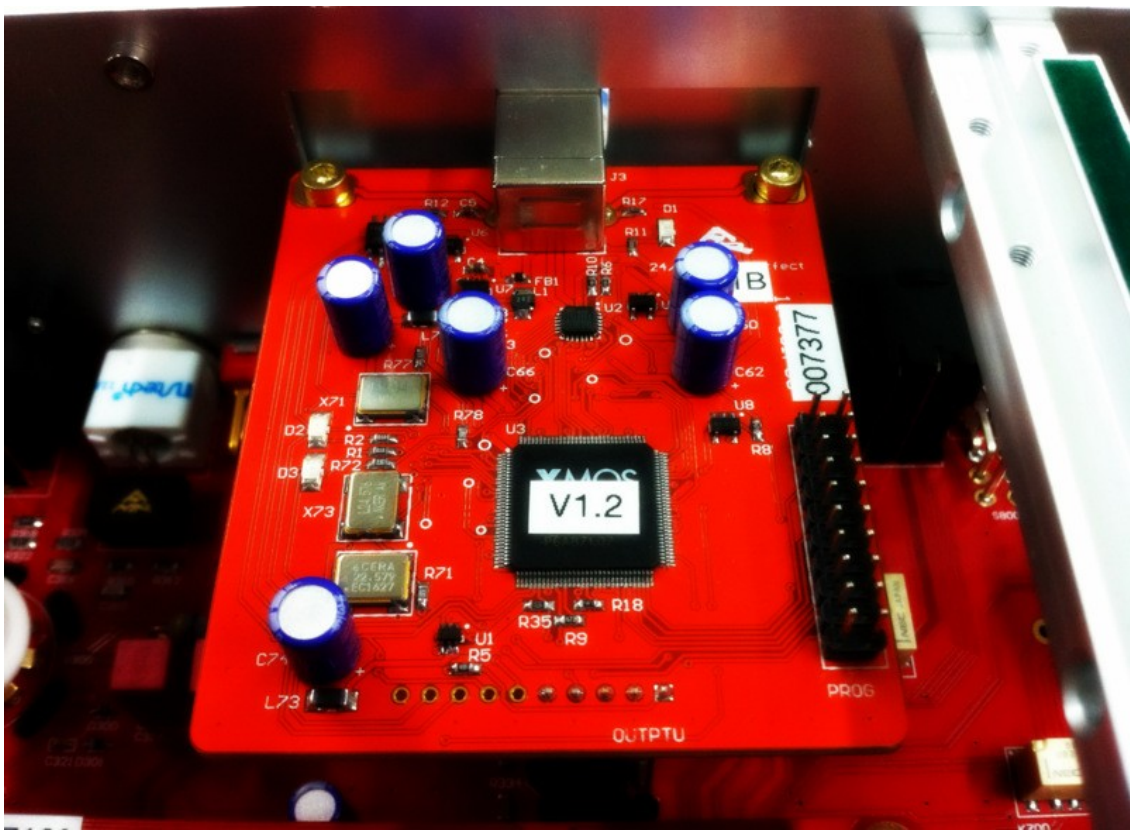


Oscon on the DigitalEngine (no big deal nowadays, every respectable manufacturer uses them); what really surprised me was the use of ELNA Silmic caps on the digital engine. This little gem is some of the best sounding power supply caps available, lovely but expensive.

This is not done yet, AMR even uses their own Music Cap for power supply! Those film caps are used mainly only for signal path in other manufacturer's equipment, rarely for power supply, againfor cost reason

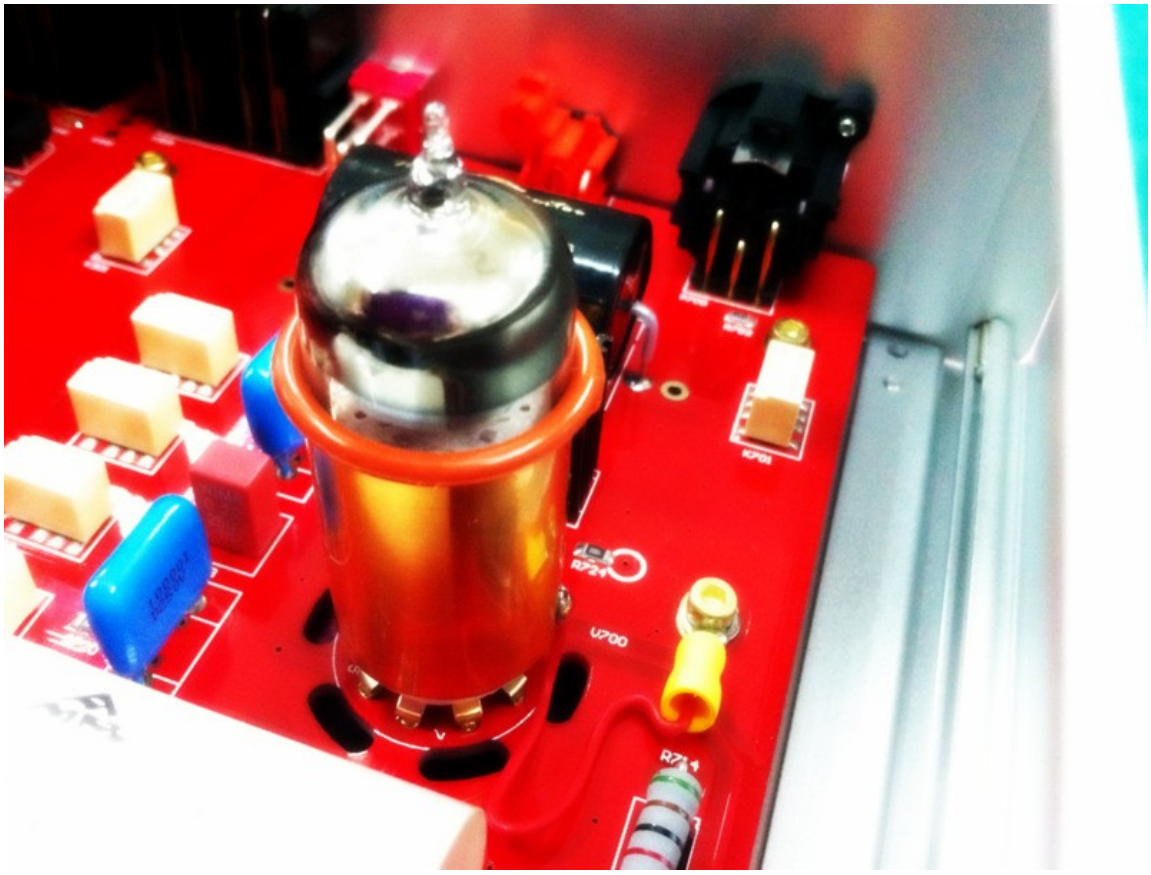


NEC gold plated silver contact reply and silver mica capacitor(blue cap)! Silver Mica cap is made with pure silver foil and mica sheets, they are some of the best sound signal capacitors, nowadays mainly use in the top of the range phono amps or delicate filters, again due to high cost and small value.

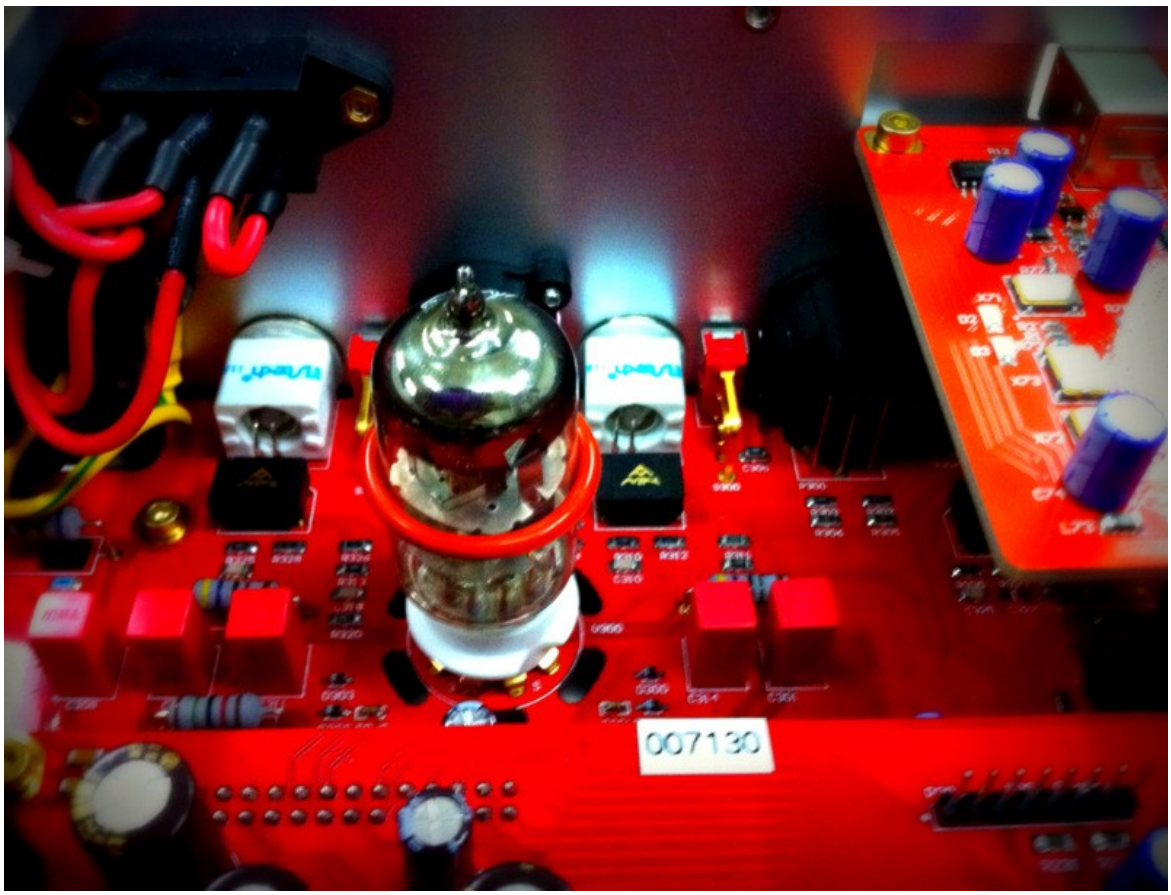


The XMOS Asynch USB, different from the XMOS reference design on the web.

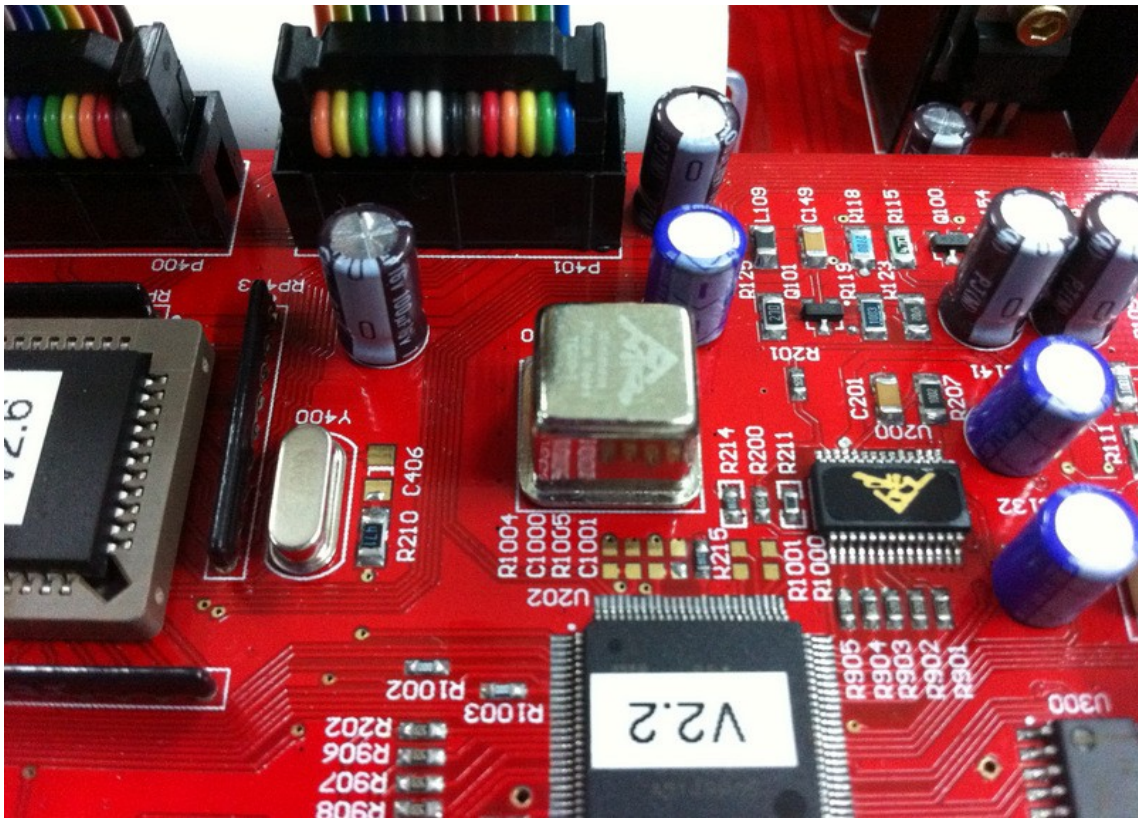
Even the screws are nonmagnetic (I tested it with a magnetic) gold plated.



Handmade copper tube shield with grounding. I remember the Audio Note UK top of the range machine use to have those.

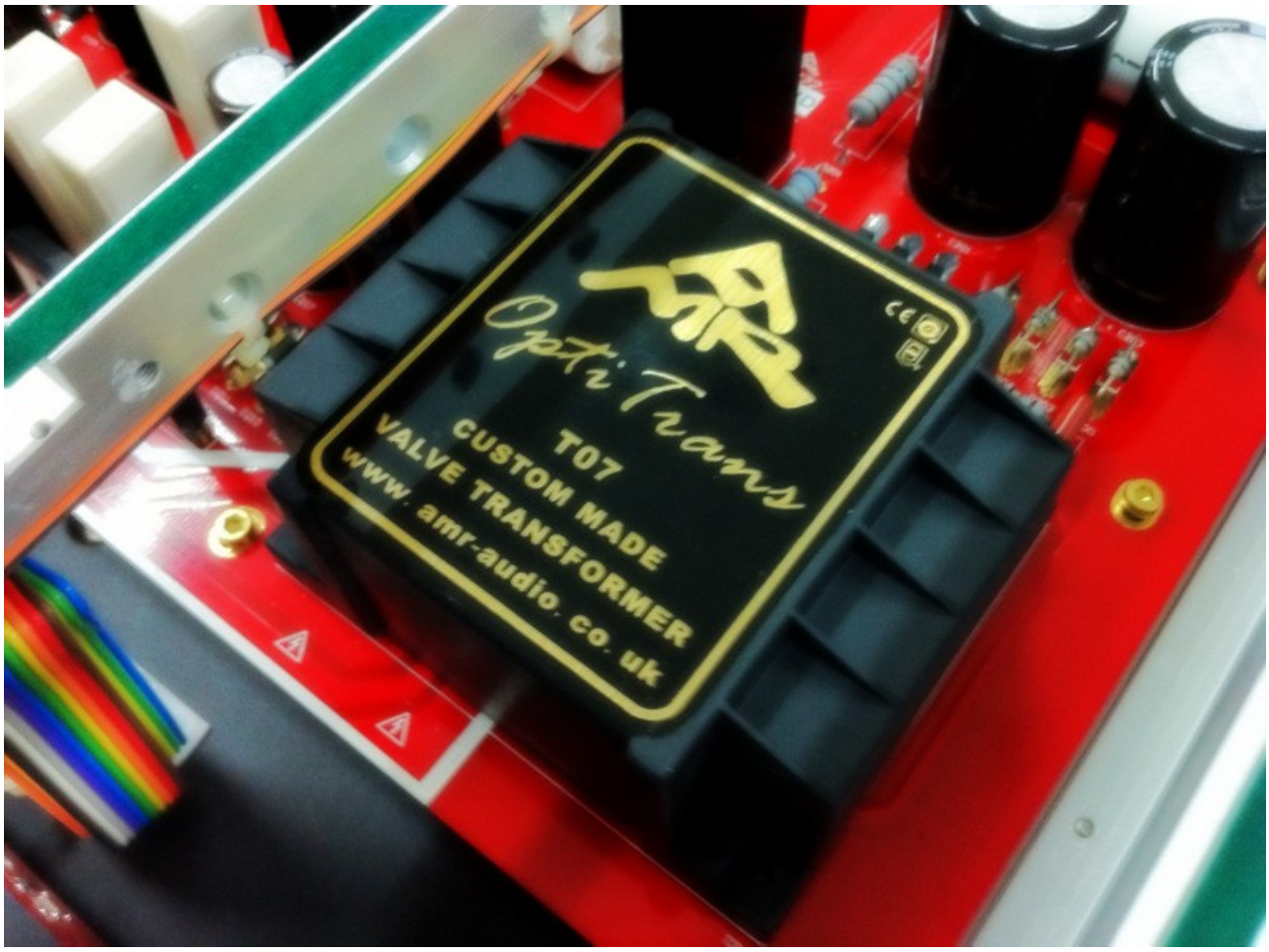


Tube conditioned SPDIF Input. I have tried my CEC transport with those inputs (1,2), and they do sound better (darker background and more solid mid-range) than the normal SPDIF input (3,4). So for people who are using a CD transport, be sure to use these input instead.

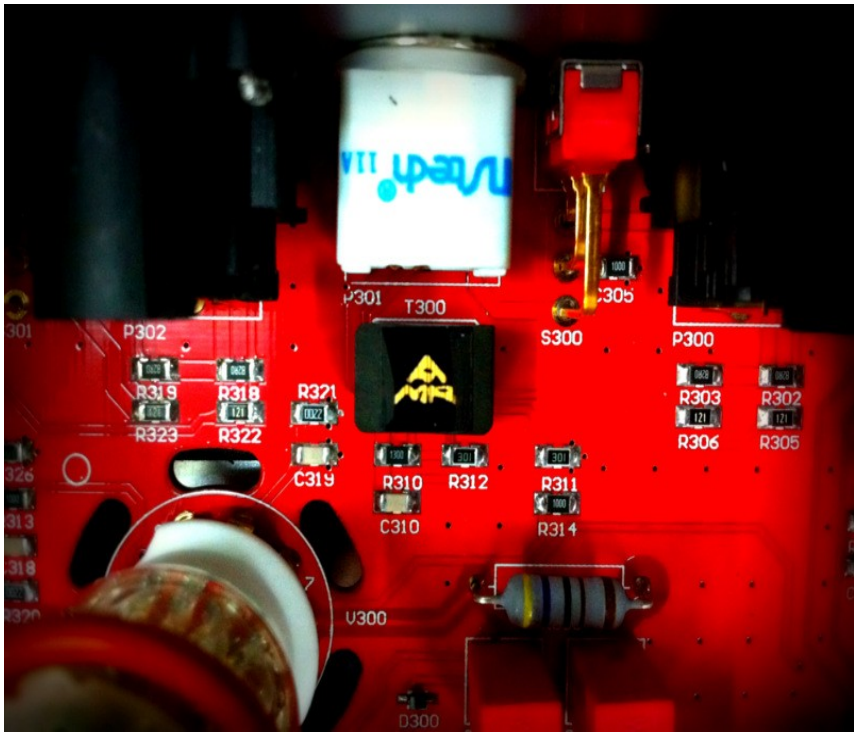


Hummm… this should be a part of the whole GMT(Global Master Timing) system with an accuracy of 0.004ppm, not as good as the Esoteric G-0Rb (0.0005ppm), but on par with dCS

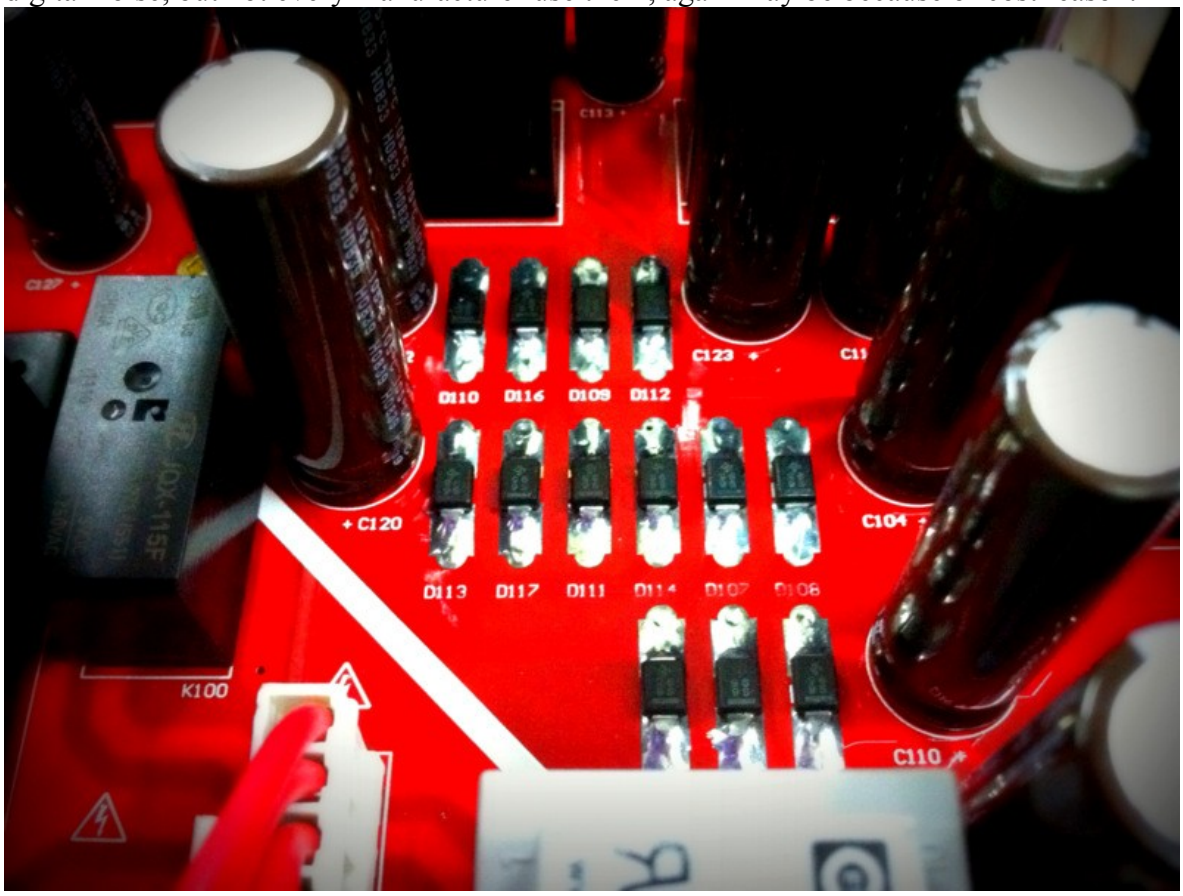
Scarlatti Master Clock / Esoteric G-03X (0.1ppm).



DP-777 has 3 individual Audio transformers to take care of different tasks, digital, analogue and control I think.



Digital isolation transformer, one SPDIF channel each. Those things work wonder in isolating digital noise, but not every manufacturer use them, again may be because of cost reason.



Vishay Schottky diodes, haven't seen them for a while, use to see them in Mark Levison top of the range products, from my experience, these diode do make a difference in sound and here is my preference (in order of preference):

1. Tube Diode
2. Schottky Diode
3. Soft Recovery Diode
4. Fast Recovery Diode
5. Normal Diode

I nearly missed this, the bottom chassis is actually a sandwich affair (see the polymer poke out at the top right corner underneath the black alloy plate). So the bottom plat is actually made out of Aluminium, polymer and alloy top plate; very interesting indeed.

Finally the tube are Russian NOS (new old stock, not current production). Although they are not as good as the NOS from Europe or US, they are much better than the current production tubes.

To be honest, I am a bit surprised by what AMR has put into this DP-777. For other manufacturers, those parts will surely be reserved for the top line products and charge 3-4 time the price.

I guess those are some of the reason why the DP-777 sounds so good. If “musical” is what one looking for, I don't think anything under US$10k can touch the DP-777.

I really want to know what will happen if I put in some EU/US NOS tubes for those Russian tubes… can it then challenge DACs above the US$15k mark? I will try to find out soon …