

# LUMĪN

X1

# LUMĪŅI

X1

KEYNOTE

LUMIN [X1]



STREAMING'S  
NEW CUTTING EDGE

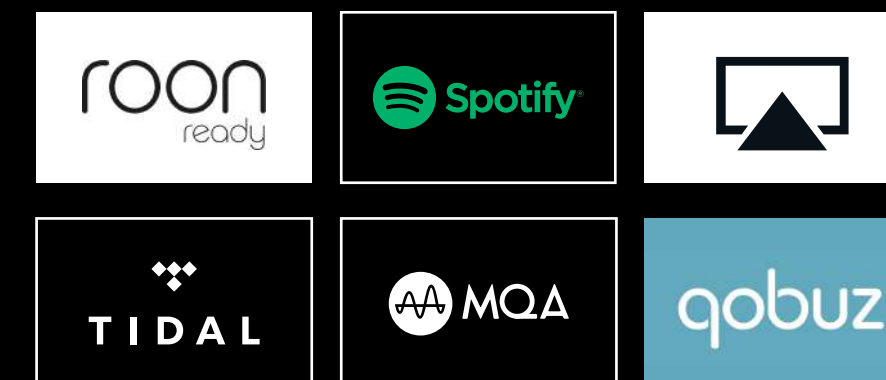
**LUMĪN** [X1]

RE-ENGINEERED  
FROM THE GROUND UP

COMPLETELY NEW APPROACH  
DELIVERS A NEW STANDARD

# LUMIN [X1] HIGHLIGHTS

- Dual-core processor delivers native DSD512 & PCM768 playback
- Dual ES9038Pro SABRE DACs
- Femto Clock System with precision FPGA distribution
- Dual Mono Dual Stage Power Supply for analogue circuitry
- Dual Network with Optical Network support
- Entirely new external Power Supply
- USB Digital Audio Output supports Native DSD512
- New Output Buffer design
- PCM & DSD Upsampling
- Roon Ready, Spotify Connect
- TIDAL, MQA, Qobuz and TunesIn



**LUMĪN [X1]**



**EXTERNAL POWER SUPPLY**

# LUMĪN [X1] PSU HIGHLIGHTS

- New solid billet CNC casing design
- Dual-toroidal Transformer design
- Separate digital & analogue circuitry
- Low-noise Linear Regulator
- New 9-pin Output Connector
- Available as an upgrade for existing SI / AI / TI customers

# LUMIN [X1]

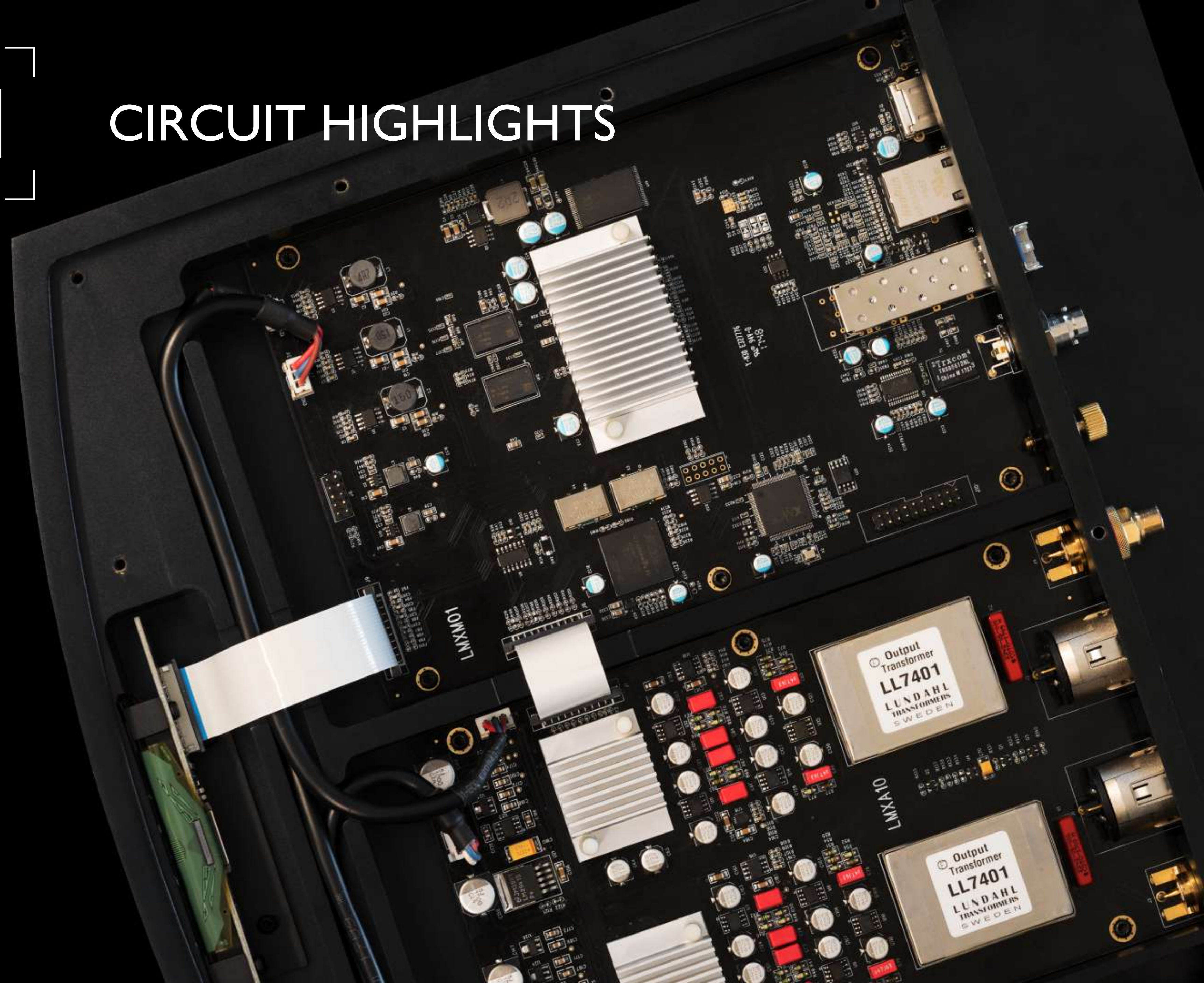


MAIN UNIT



# LUMIN X1

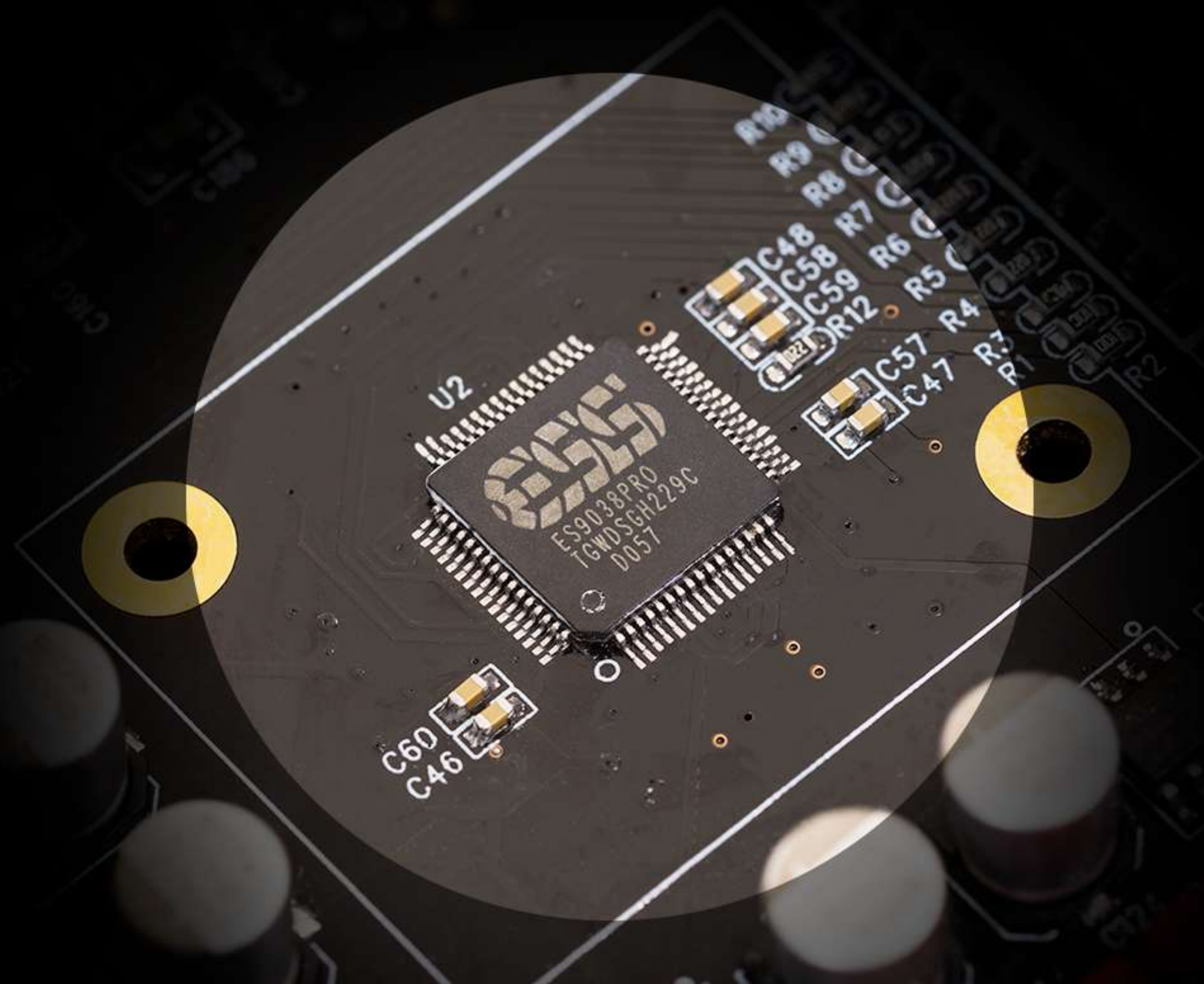
## CIRCUIT HIGHLIGHTS



# LUMIN X1

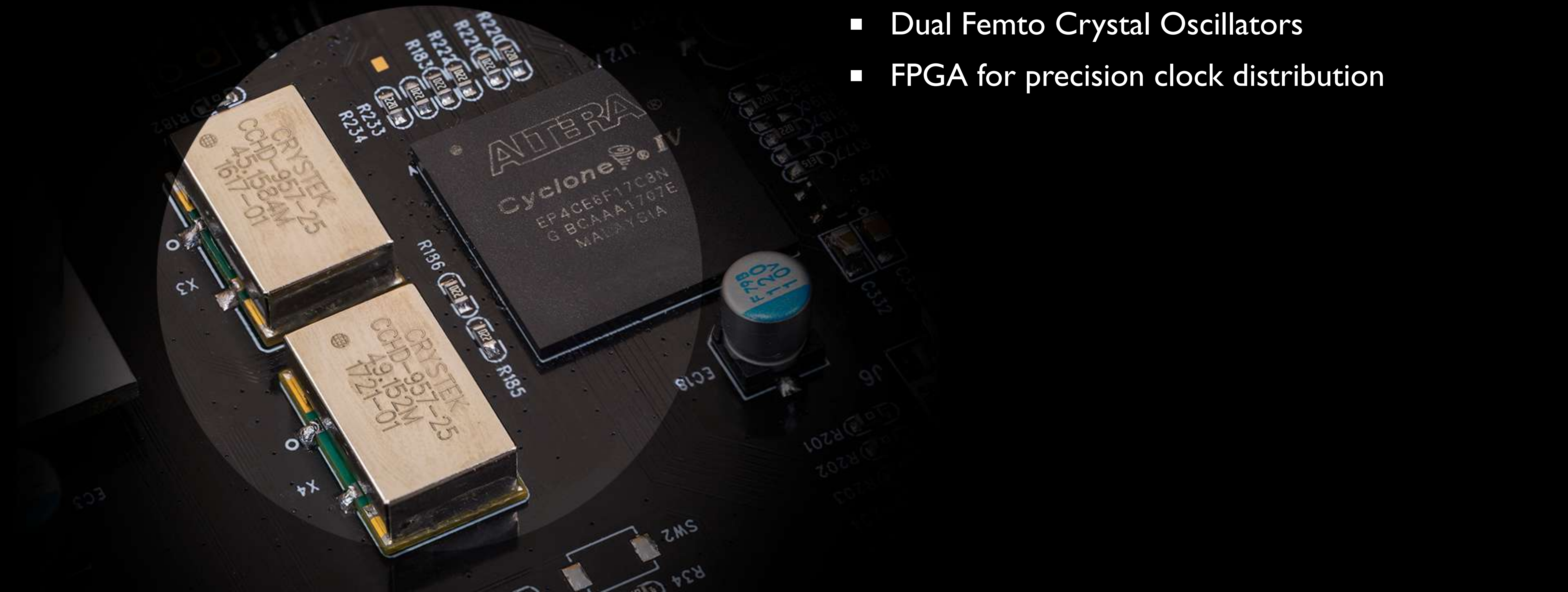
## DUAL ES9038PRO CONVERTER

- Dual Mono Operation
- 32-bit precision volume control
- DSD512 22.6MHz
- PCM 768kHz



# LUMIN [X1] FEMTO CLOCK SYSTEM

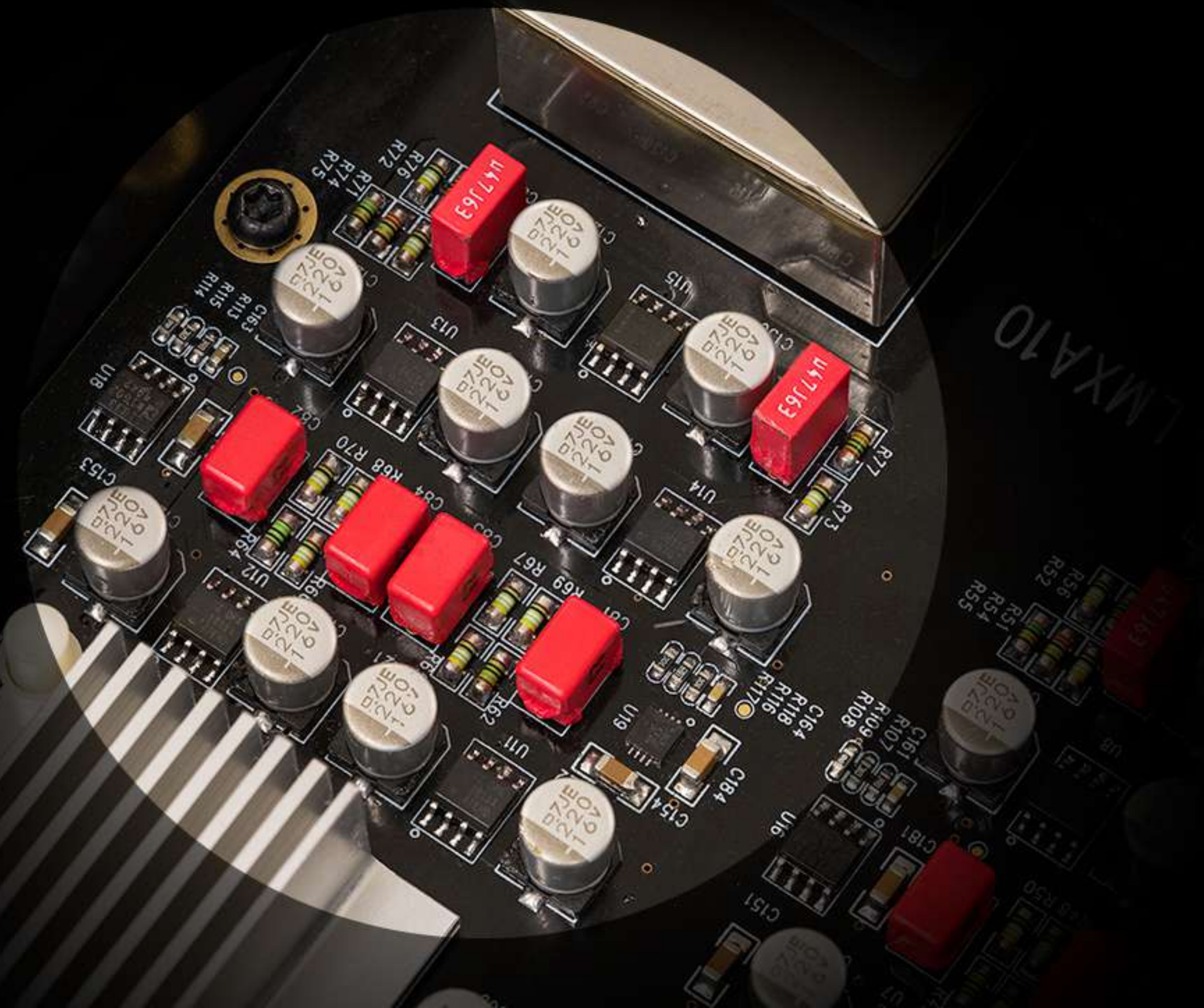
- Dual Femto Crystal Oscillators
- FPGA for precision clock distribution



# LUMIN X1

## NEW OUTPUT BUFFER DESIGN

- Fully balanced analogue output module
- Output transformer compensation circuitry
- Improved clarity, detail, poise and warmth



# LUMIN [X1] DUAL MONO DUAL STAGE LINEAR REGULATOR



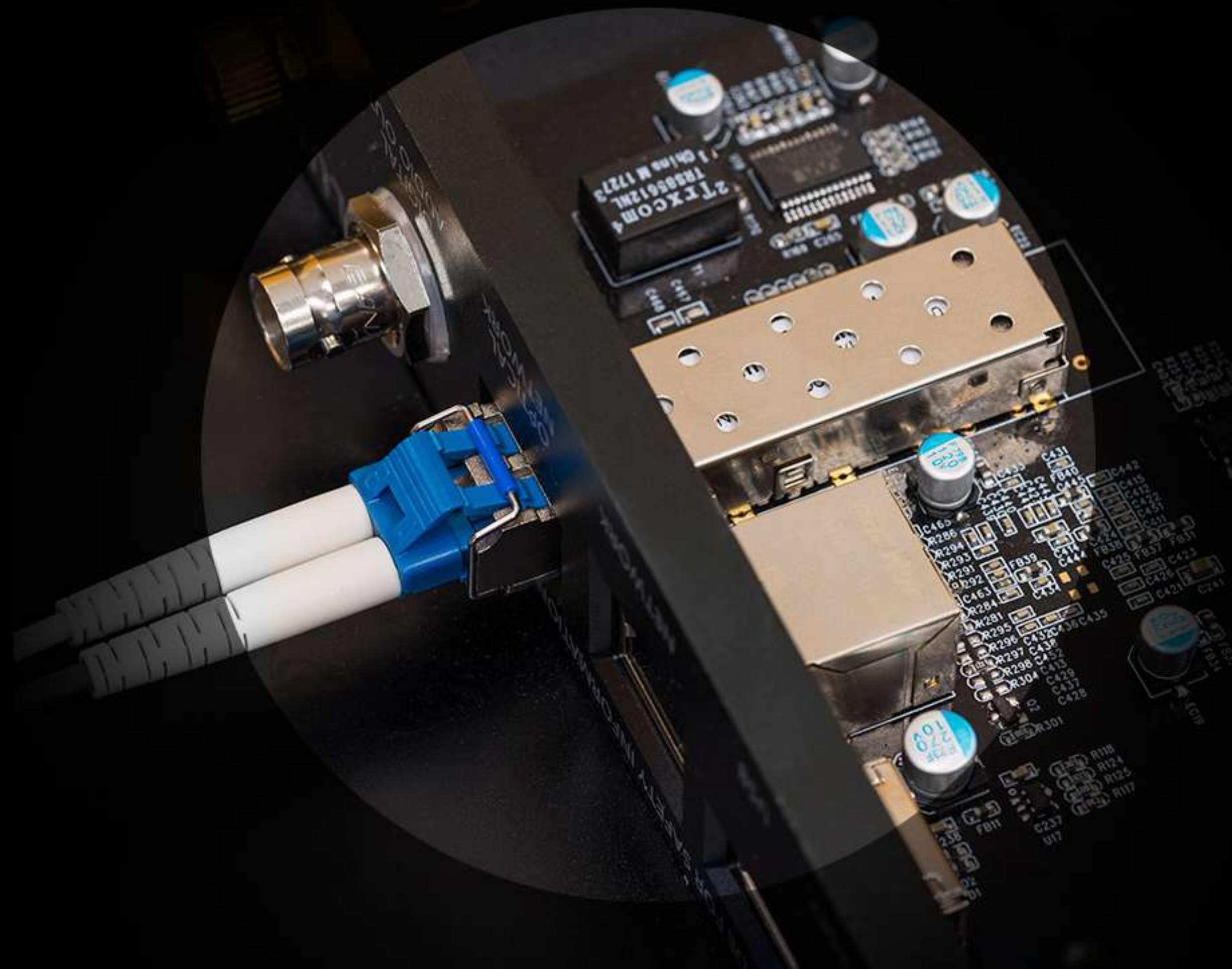
- Dual Stage low-noise power regulator for analogue converters
- Dual Mono design for maximum channel separation

**LUMİN** [X1]

LUNDAHL OUTPUT TRANSFORMER



# LUMIN [X1] BUILT-IN OPTICAL NETWORK



- Industry-first audiophile network streamer with built-in Optical Network capability
- Provides complete isolation from network digital noise
- Industry-standard SFP for maximum compatibility
- Ultra-low latency network performance

# LUMIN

# X1

## SPECIFICATION

### STREAMING PROTOCOL:

UPnP AV (OpenHome) protocol with audio streaming extension. Gapless Playback. On-device Playlist. Roon Ready

### SUPPORTED AUDIO FILE FORMATS:

#### DSD :

DSF (DSD), DFF (DSD), DoP (DSD)

#### PCM:

FLAC, Apple Lossless (ALAC), WAV, AIFF

#### OTHER:

MQA, MP3, AAC (in M4A container)

### SUPPORTED SAMPLE RATES & BIT

#### DEPTHS:

PCM, 44.1kHz–768kHz, 16–32-bit, Stereo

DSD512, 22.6MHz, 1-bit, Stereo

### UPSAMPLING RATES & BIT DEPTHS:

PCM 384kHz and DSD128 upsampling option for all files up to 192kHz

### SUPPORTED CONTROL DEVICES:

Apple iOS devices. iOS 5.0 or later required

Android devices. Android 4.0 (Ice Cream Sandwich) or later required

### APP FEATURES:

Volume control. High-resolution artwork. Artwork caching. Multiple-tag handling. 'Composer' tag support. Find. Automatic internet links to artists/album/songs. Saving and restoring of playlists.

### INPUT:

RJ45 Gigabit Ethernet Network (1000BASE-T)

SFP Gigabit Optical Ethernet Network (1000BASE-T)

USB storage, flash drive, USB hard disk (Single-partition FAT32, NTFS and EXT2/3 only)

### DIGITAL AUDIO OUTPUT:

#### USB:

DSD64/128/256/512 2.8-22.6MHz, 1-bit Stereo

PCM 44.1–768kHz, 16-32-bit Stereo

#### COAXIAL BNC:

PCM 44.1kHz–192kHz, 16–24-bit

DSD (DoP, DSD over PCM) 2.8MHz, 1-bit

### POWER SUPPLY:

External dual-toroidal PSU. CNC construction with finish matched to main unit

Available in 220–240V AC and 110–120V AC versions ~ 50/60Hz

### OTHER:

Firmware Upgradable for further features and enhancements

### PHYSICAL:

LUMIN: 350mm (W), 345mm (D), 60mm (H), 8kg

PSU: 106mm (W), 334mm (D), 60mm (H), 4kg