CHARLES BLANCHARD | www.blanchardconcepts.com

Detail oriented designer with over 15 years of experience creating visual solutions for branding, print, digital, and web projects. Skilled in Adobe Creative Suite, utilizing grid-based design, high-contrast color theory, and refined typography to produce production-ready assets. Proficient in collaborating with teams to deliver materials that align with client goals. Experienced in managing projects from conception to delivery. Studied and varied academic background with output centric production methods.

EDUCATION

Associates in Applied Science | Communication Design | 2012 - 2014
Northampton Community College | Bethlehem, PA
GPA: 3.65
Dean's list: 2012 - 2014
Phi Theta Kappa Honor Society 2014 - Present.

APPLICABLE SKILLS

3D & 2D Design | Typography | Print Media | Production | Concept Design | Poly Modeling | Pantone | UI Theory | Vector Art | Industrial Design | 3D Printing | Web Design | Color Theory |

EXPERIENCE

2015 - 2025

Super Systems Softworks LLC
Founder, CEO.
Business Management.
CCO & Design Lead.
Social Media Marketing Direction.
Asset and Financial Management.
Merchandise Production and Design, Third Party Licensing.

2014 - 2021

Sky Rogue (PC, Xbox, Switch)
Design Contractor.
Art Direction, Creative Lead.
3D & 2D Asset Creation and Conception.
Hard Surface Mechanical Design.
Web and Print Marketing.
Testing & Debugging Phases.

2012 - 2017

Freelance Designer (Various studios, greater NYC area.)
Development of product packaging elements, in conjunction with promotional web presence.
Production based design & iteration over multiple quarters.
Cross organization dynamics managed via multiple forms of communication and file-sharing platforms.
(email, phone, meetings, dropbox, physical postage, on-site delivery.)

SOFTWARE PROFICIENCY

Adobe Illustrator CC | InDesign CC | Photoshop CC | After Effects CC | Maya | Blender | Marmoset Toolbox 4 | Autodesk 3D Studio Max | Cura | Wings3D

MEDIA

Rolling Stones	"How Games Are Resurrecting the Eighties, One Neon Sunset at a Time" — Luke Winkie | September 6, 2016 http://www.rollingstone.com/culture/news/how-games-are-resurrecting-the-eighties-w438319
Red Bull	"Drift Stage: Retro Racing Nirvana" — Jon Partridge | January 23, 2015 https://www.redbull.com/us-en/drift-stage-kickstarter-interview

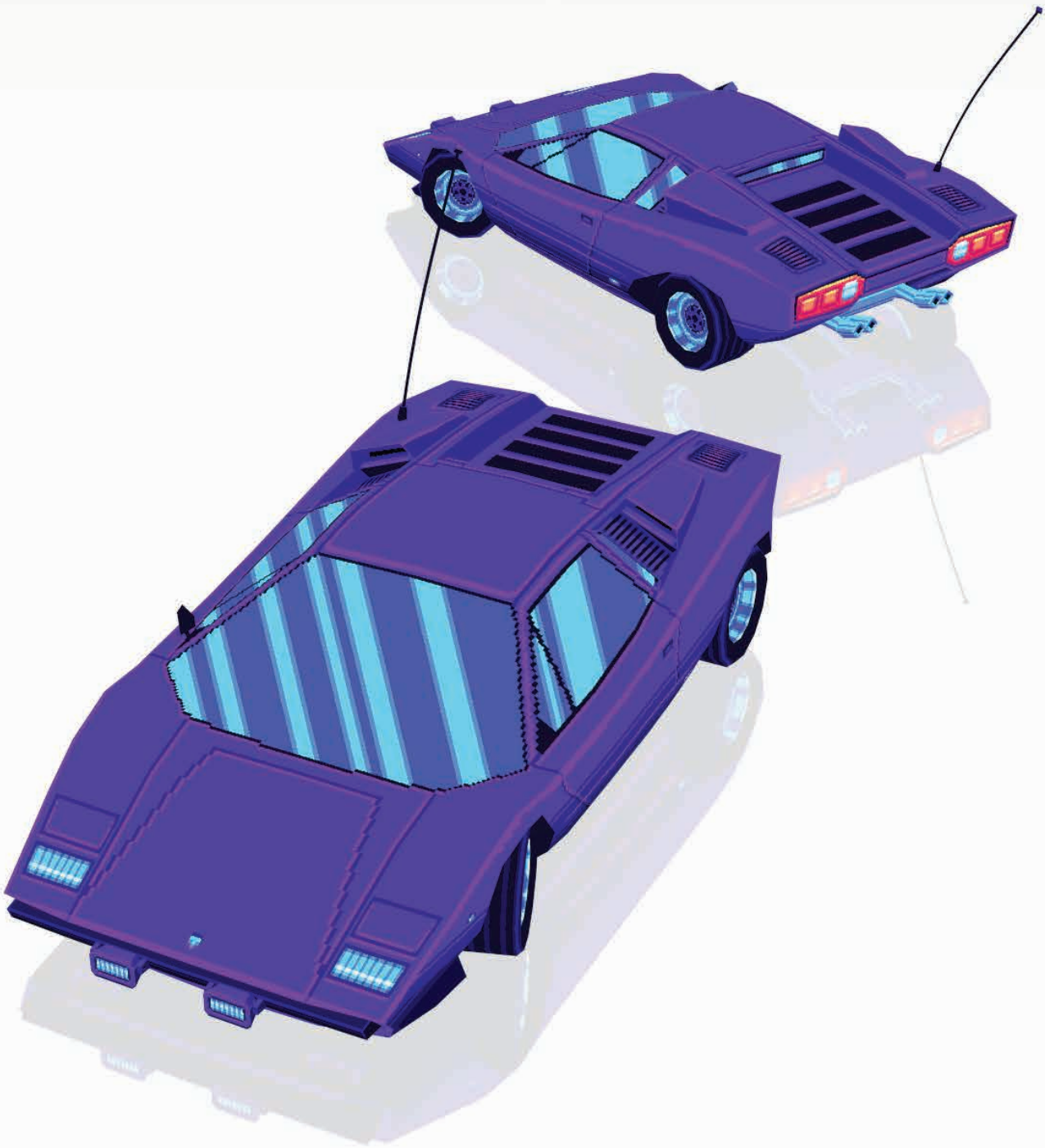
COURSE OF STUDIES:

- Drawing I.
- Drawing II.
- Principals of 2D Design & Color.
- Computer Graphics.
- Principals of 3D Design.
- Art History.
- Advanced Web Design.
- Typography I & II
- Digital Design.
- Web Animation.
- Package Design.
- Portfolio Workshop.

REFERENCE

Traci Anfuso-Young	**Director/Designer at TLA Design Studio** Adjunct Professor - Northampton Community College.
Michael Rajna	**Senior Director of Business Development & Licensing.** Konami Digital Entertainment, Inc.
Katie Schaffer	**Software Engineer II | Web Developer.** Microsoft Cloud Divison.
Alex Palomares	**Director of Business Management | Developer Relations.** Nintendo of America Inc.
Jaime Toth, PhD	**Adjunct Professor | Marketing Director.** University of Phoenix.
Richard Duck	**Developer Relations | Manager.** Nintendo of America Inc. Meta Platforms, Inc.
David Williams	**Head Football Coach, Multi-Win District Champion.** Tamaqua Football League

3D Studio Max
Scanline Render
Raytraced Reflections.



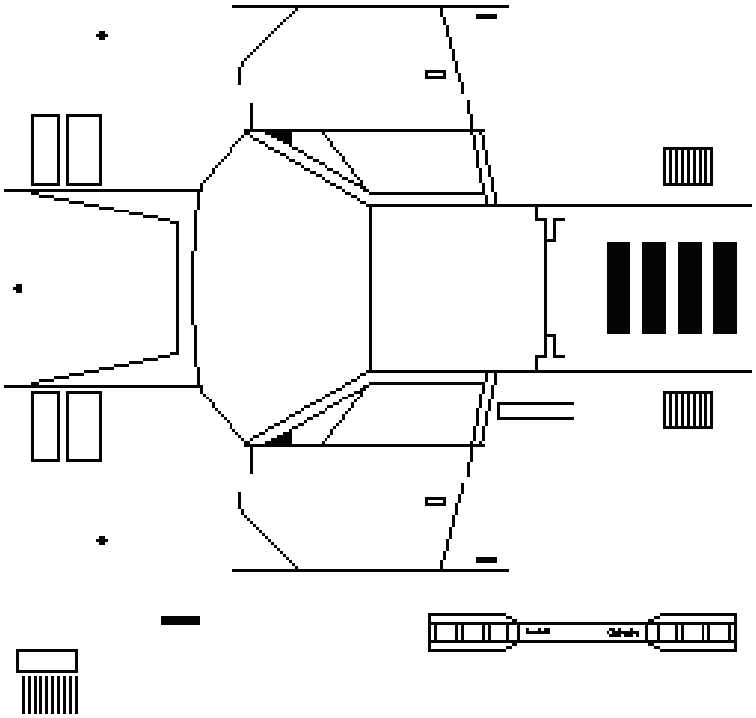
LP400 Sports Car | 1664 Triangles

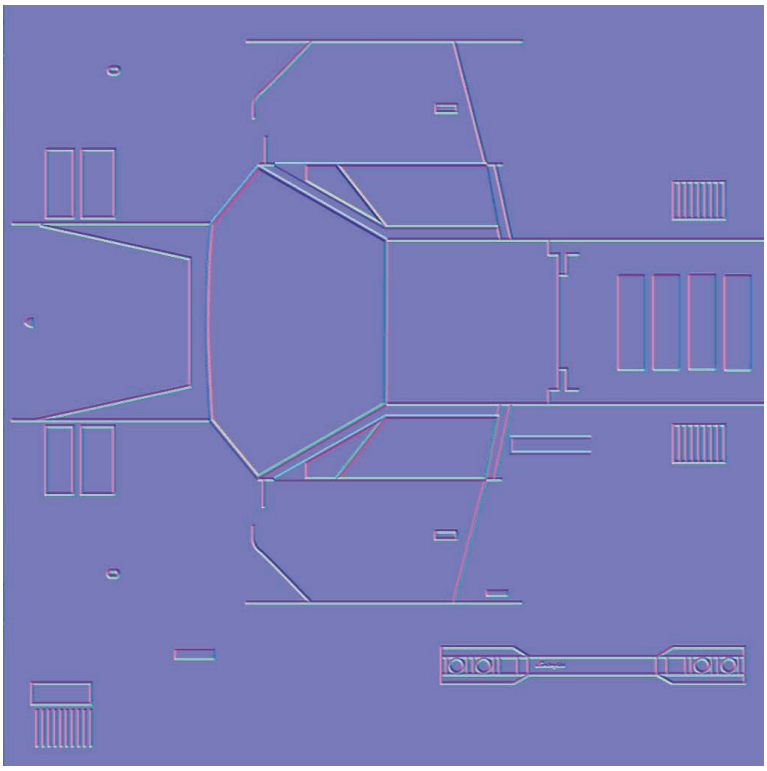
Brief:

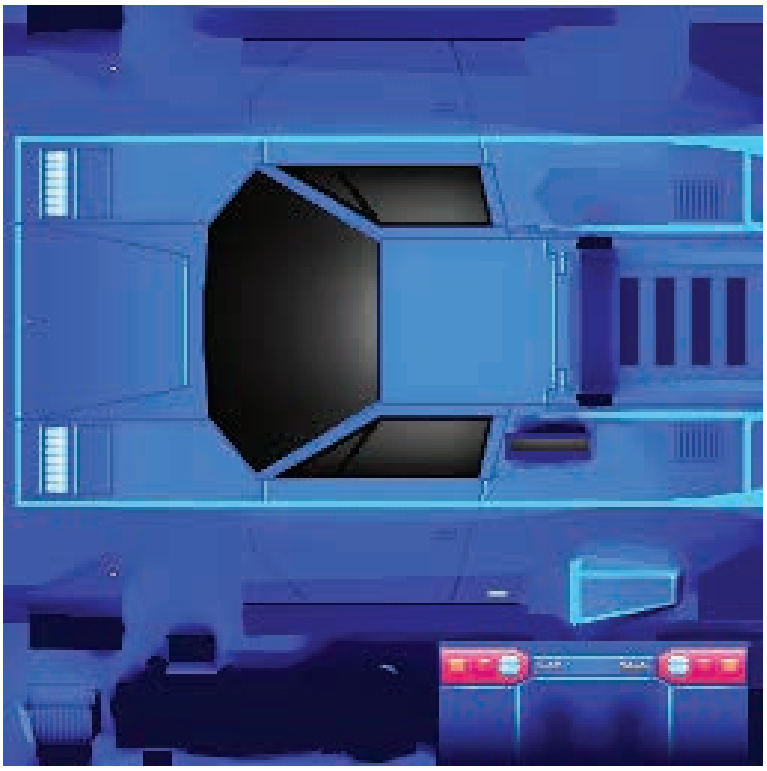
The car model shown above represents a design process that incorporates the high-fidelity and nostalgic qualities of pixel art with low-polygonal, highly optimized 3D models. Taking advantage of the inherit qualities of fully-lit materials with no texture filtering, this treatment offers minimal performance impact, allowing for high-density asset popualtion in engine.

Alternate Material Treatment

Reusing the same UV mapping and base detail texture maps allows for a seamless and modular conversion to more contemporary art styles, using normal mapping and ambient occlusion to achieve different shading. The adaptability of this method allows for reusable assets given multiple art-directions or concepts that would normally require entirely new models and textures. Used in conjunction with shaders, this process yields detailed and efficent assets.







Texture Process | LP400 Sports Car

The approach taken in creating the maps for both variations of the “LP400” model, employ an iterative process, starting with an initial monochrome detail map, derivied from a single 256x diffuse map. This map is then traced with a vector art program, allowing for a scalable template for conversion into normal maps, or as a base for the diffuse map.

LP400 - Wireframe

256 x 256 normal maps, down-scaled from high resolution.

1024 x 1024 normal maps, baked from vector file.

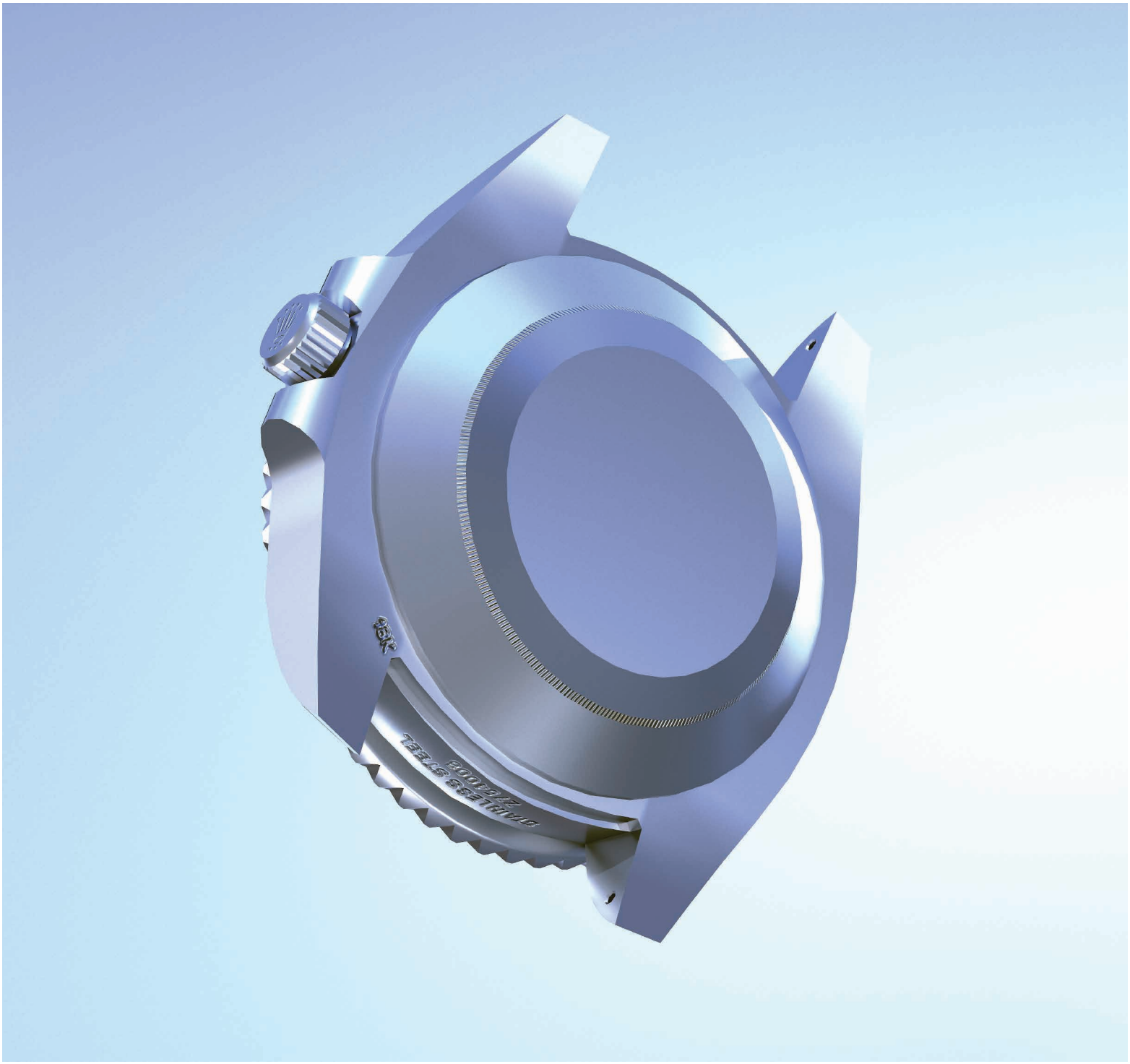
Comparison of 1024x and 256x normal mapping.

Dive Watch I 6560 Triangles

Brief:

This exercise demonstrates an efficent and adaptable modeling and texture solution that incorporates all of the nessesary facets required in contemporary rendering pipelines; reducing the overall complexity and dependance on specialized tools and proprietary software.

By utilizing the inherent qualities of modern shaders; I opted for modular, monochromatic texture maps - all based on scalable vector art. This allows for in-engine conversion to normal maps, in addition to highly portable conversion to any other required map. The end result allows for easily repacked or compressed texture files, leaving final color & surface properties to the engine - while still maintaining ease of creation and modification with image-editors.

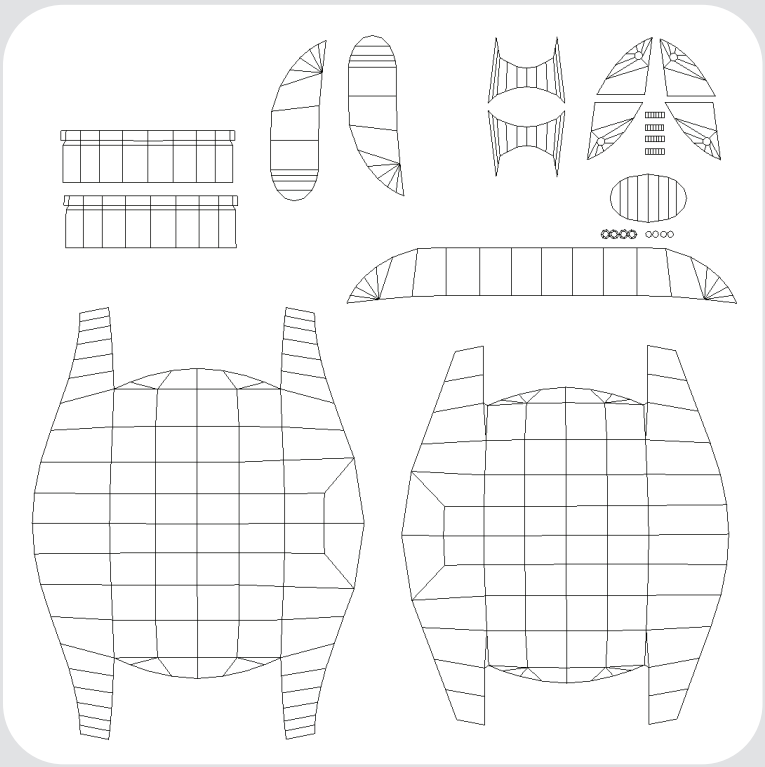


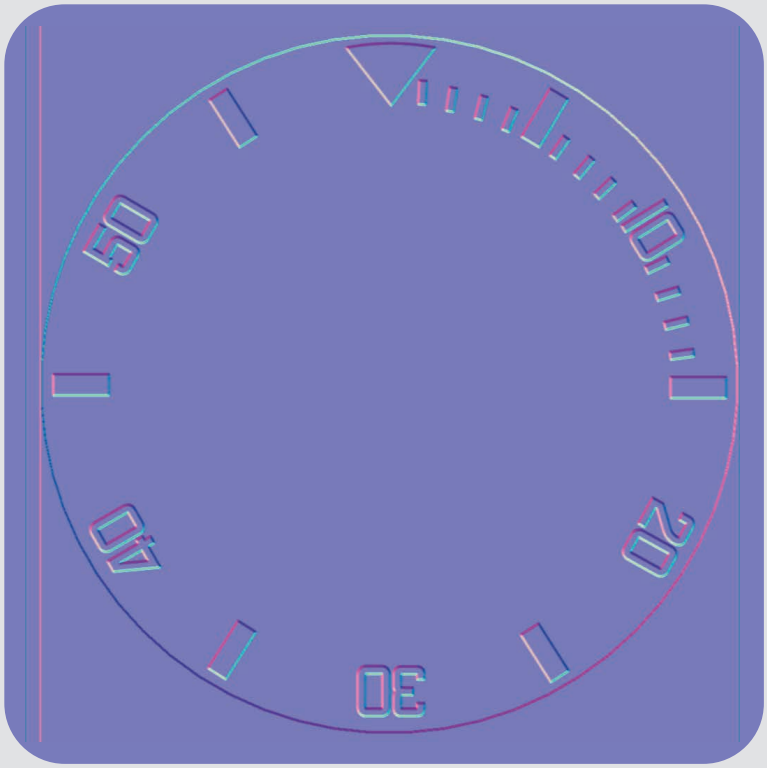
In regard to the geometry used on this project, a low poliginal base mesh was created, utilizing quads and easily subdiviable surfaces to allow for increased fidelity. This method also enables ease of modification of the basic case model - in order to create variations. Certain parts of the model, such as the bezel teeth - were made intentionally as simple as possible to showcase maximum optimization potential while still maintaining correct silhouetting and shape recognition.

Overall, the combined effect of highly optimized geometery, simple but detailed and effective material process, and a modular and portable workflow allow for high fidelity graphics in almost any rendering environment; irregardless of the type of shaders used, whether they be raytraced or a simple environemnt map.

Professional Dive Watch
Marmoset Toolbag 4
Raytraced at 512 Samples
6,560 Triangles


1000ft=300m
SUPER ATIVE CHRONOMETER
OFFICIALLY CERTIFIED
30





Texture Examples | Dive Watch

Material Process:

The examples, shown above - demonstrate the process of the initial UV unwrapping, baking of ambient occlusion, creation of diffuse maps, and final compsition; if applicable.

For the purposes of this model, multiple 1024x1024 texture maps were utilized. This method of mapping allows for the maximization of details, font clarity, and texel density for scalable optimization by reducing or increasing the maps exported size.

Viewport Wireframe

Wireframe | Viewport

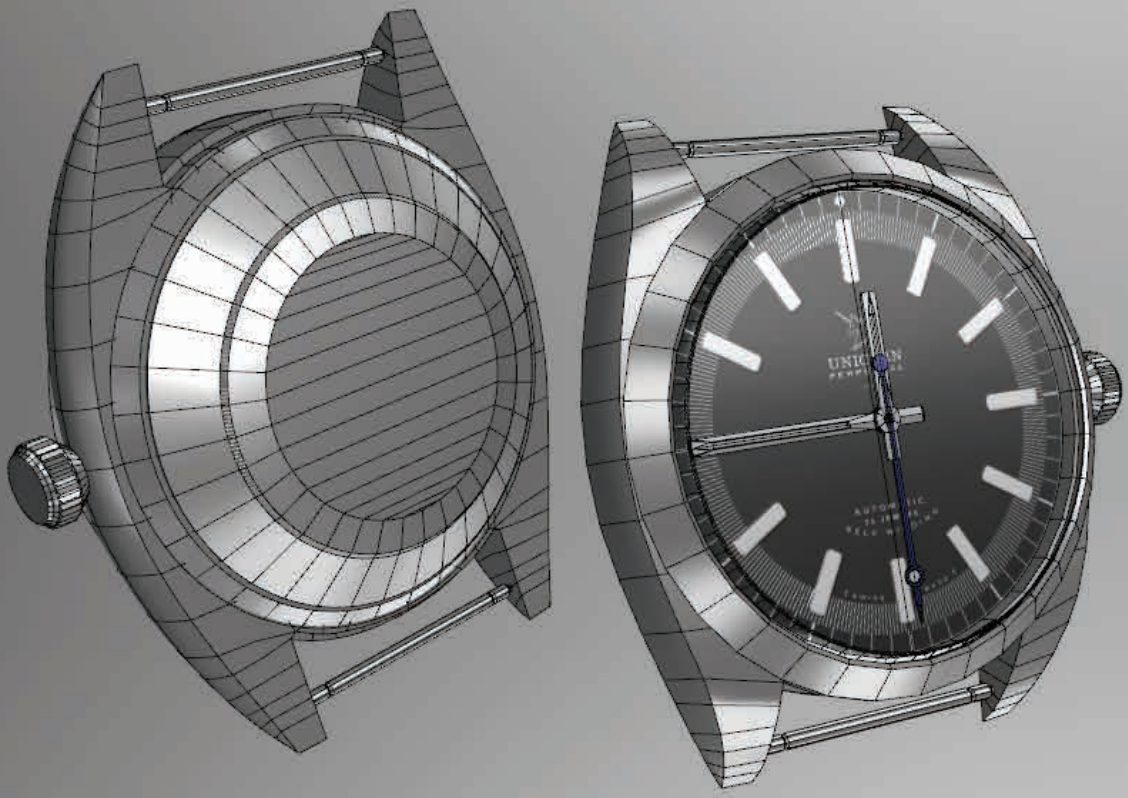
Thesis & Conclusion:

The initial goal of this project sought a highly portable and modular design process that yielded production quality, high detail assets with fewer dependacies on licenses and specialized software packages - all while mainting maximum compatibility and portability with modern work environments; including game engines and more exotic rendering suites. Overall, the desired effect is achivable on both high and low specification hardware; making this process extremely versitile accross mobile, web, and PC platforms.

Alternative Applications

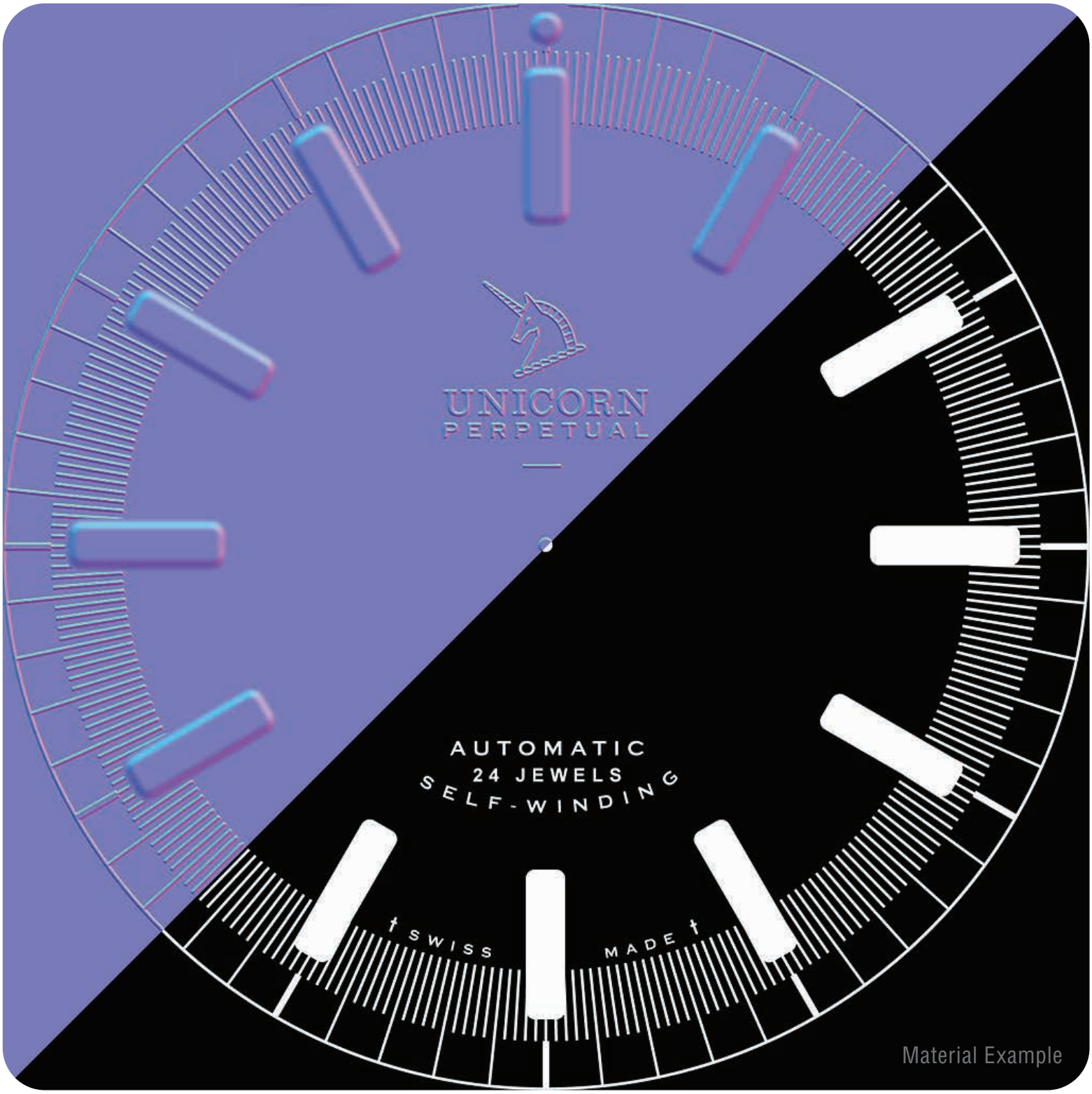
Variations applied to the base mesh and textures.

Gold Automatic Watch
Marmoset Toolbag 4
3,740 Triangles



Viewport Wireframe

Material Detail
1024x Normal Map + Diffuse

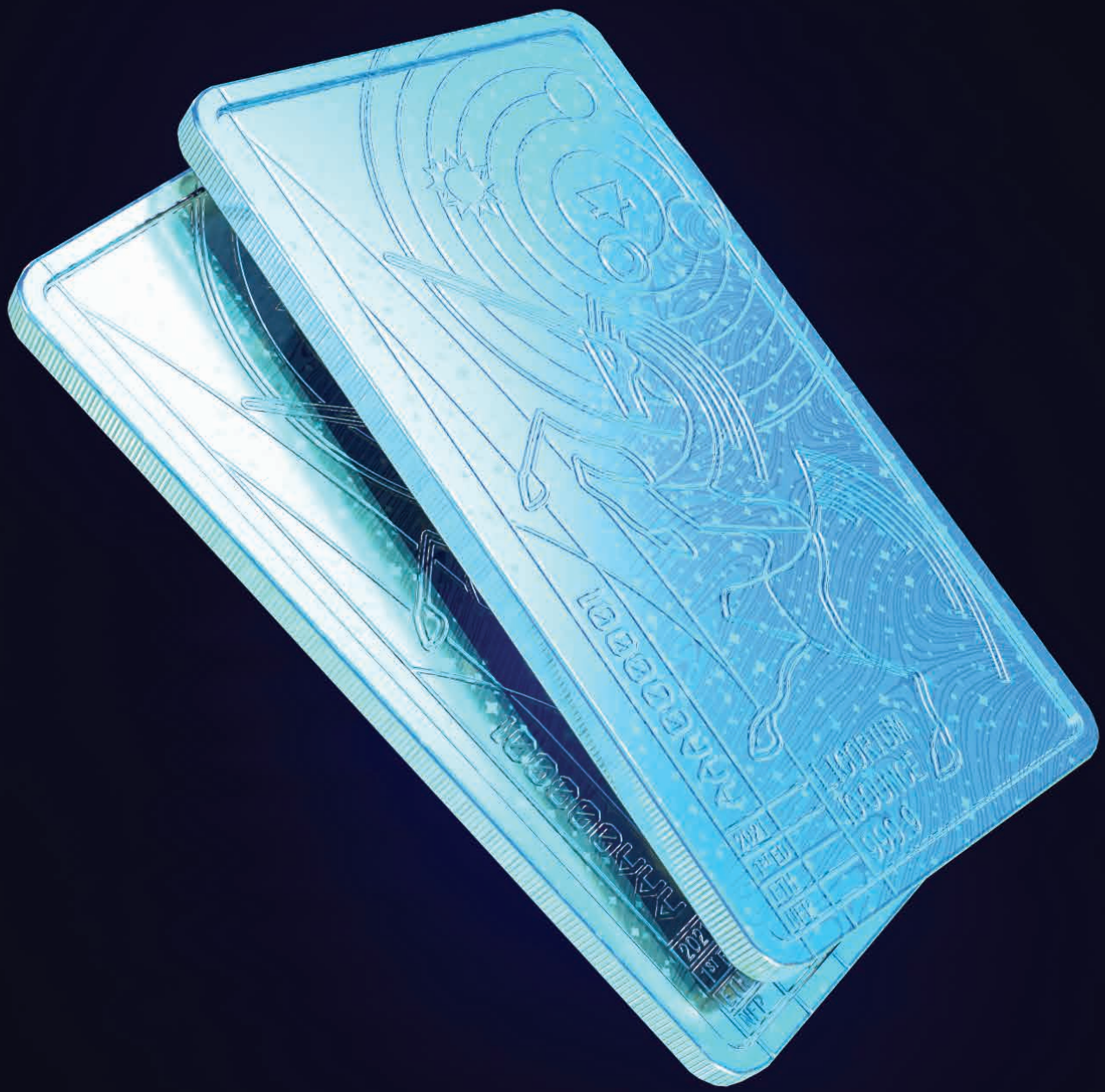


Alternative Process Observations.

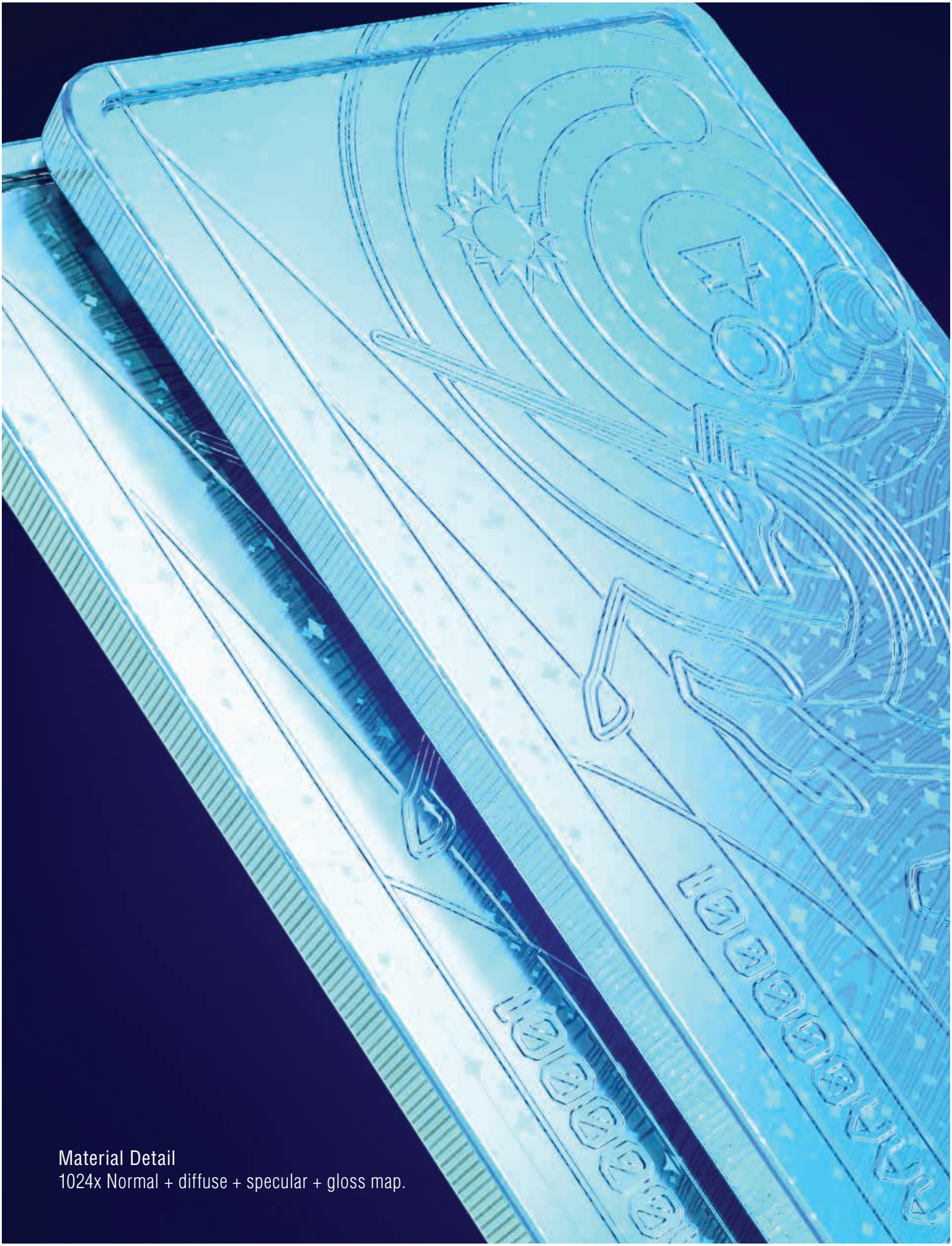
Application of post process otimizations resulted in a reduction of over half the triangles of the pervious dive watch model; due to the absense of detail geometry on the clock dial's face - and overall trianlge count reductions reflecting changes intrinsic to a simpler bezel design. This application relied on the conversion of a high detail vector file directly to a composited normal map.

Higher surface detail and precision can be employed when working with a 2D source file, outside of a typical modeling or rendering software pipeline.

Specular Applications



Material Detail
1024x Normal + diffuse + specular + gloss map.

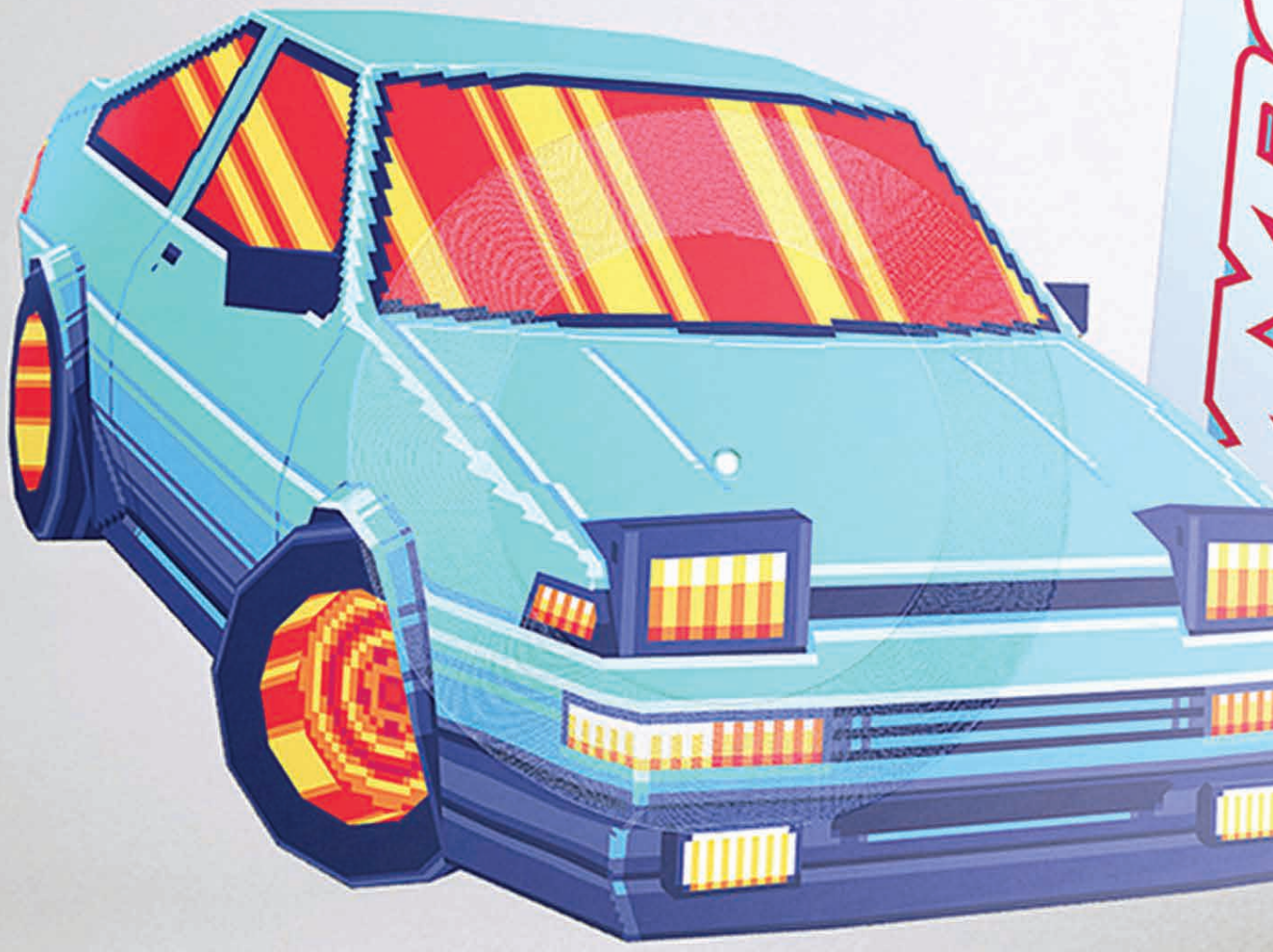


Material Detail
1024x Normal + diffuse + specular + gloss map.

“Charizard”

“Charizard”®
Highpoly mesh.
3D printable model.
Marmoset Toolbag 4; 2017.

Drift Stage Vinyl Album, Vol. 1 - Single




DRIFT
45 RPM
SUPER
SYSTEMS

Nintendo Switch Joycon.


OCT
22'