



DIGITAL CORE DESIGN

100% safe
cryptographic system

Crypt-One

WHY?

Both the European Commission and the US National Security Agency emphasize the need to create a new security system that will be resistant to threats that are becoming more frequent.

Quantum computers mean the end of classic cryptography.

CryptOne
is an answer to today's
cybersecurity
threats

WWW.CRYPT-ONE.COM



TIME FOR NEW?

A COMMENT FROM CEO

The development of quantum computers means the end of classic cryptography.

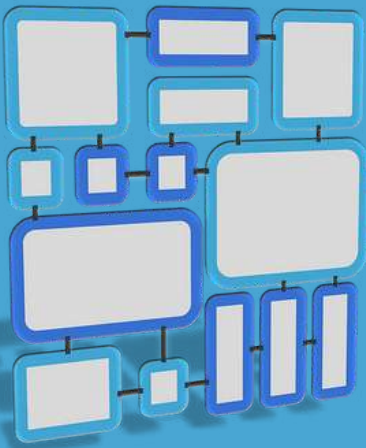
That is why our engineers in cooperation with outstanding Polish cryptographers have developed a proprietary cryptographic system that fully complies with the EC (PSD2) and NSA guidelines.

What does that mean? Unlike processors known from computers and phones, Crypt-One is a tailor-made processor. Depending on the industry or project, this system may have different functionality (RSA, EC, TLS). Only one thing remains unchanged - 100% security.

Looking for reliable contractors? You're in the right place. Our team is dedicated to providing top notch services at affordable prices. We have many years of experience in a wide range of industries, and always get the job done right. Feel free to get in touch anytime, day or night.

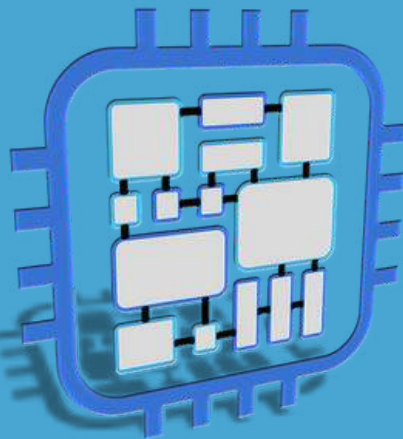
JACEK HANKE
CEO

OUR APPROACH



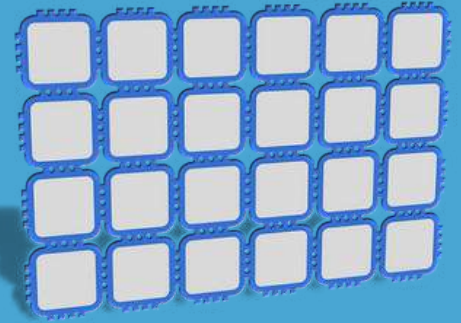
100% SAFE

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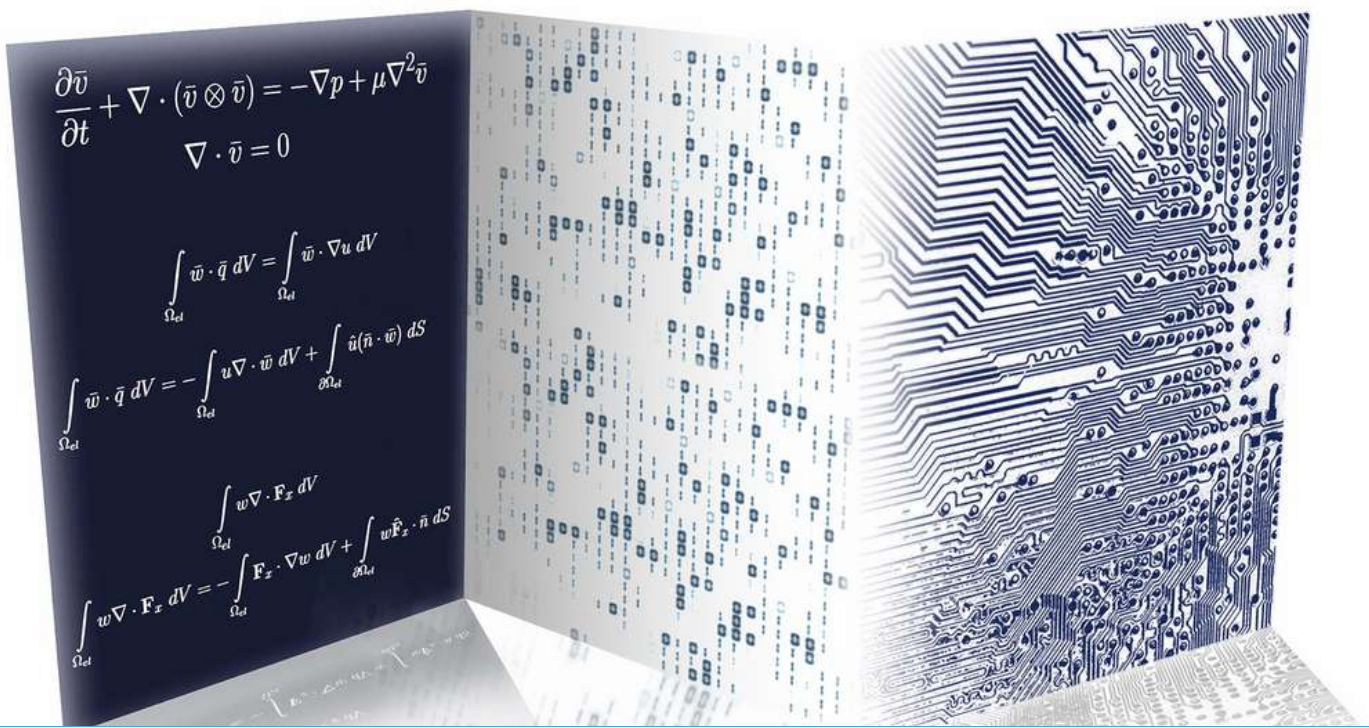
100% CUSTOM

Depending on the project needs, CryptOne can be optimized, basing on the requirements of the final product. That wouldn't be possible without DCD's designed from the scratch CPU. The D32PRO is a fully scalable solution based on more than 20 years experience.



100% INNOVATIVE

Almost every single device is equipped with electronics or use electronics in manufacturing. DCD-SEMI has been always devoted to innovative IP Cores. Presented at IP SoC Day in Shanghai, CryptOne was chosen as the most innovative IP Core of the Year.



FOR WHOM?



TELCO

MODERN IT SYSTEMS ARE EXPOSED TO HUNDREDS OF MORE OR LESS SOPHISTICATED ATTACKS EVERY DAY. THE IMPLEMENTATION OF CRYPT-ONE ALLOWS THE USE OF ELLIPTIC CURVES WITH UNAMBIGUOUS IDENTIFICATION USING DISPOSABLE KEYS, THANKS TO WHICH THE PROTECTED SYSTEM HAS THE HIGHEST LEVEL OF SECURITY.



FINTECH

THE DYNAMIC DEVELOPMENT OF FINANCIAL SYSTEMS USING THE LATEST ELECTRONICS SOLUTIONS RESULTS IN INCREASED CONVENIENCE OF USE AND ... INCREASED NETWORK SECURITY THREATS. THANKS TO THE USE OF PROPRIETARY SOLUTIONS OF POLISH CRYPTOLOGISTS, CRYPT-ONE OFFERS UNIQUE AND INNOVATIVE SOLUTIONS THAT ALREADY FULLY CONFORM TO, AMONG OTHERS, THE POSTULATED PSD2.



E-GOV

E-IDS, EPASSPORTS OR E-PRESCRIPTION INCREASE THE CONVENIENCE OF USE AND SIGNIFICANTLY SHORTEN THE DISTANCE BETWEEN THE CITIZEN AND THE OFFICE. HOWEVER, TO ENSURE THE HIGHEST LEVEL OF SECURITY OF THIS RELATIONSHIP, CRYPT-ONE IS BASED ON DCD'S PROPRIETARY PROCESSOR, WHOSE ARCHITECTURE IS KNOWN ONLY TO TWO ENGINEERS INSIDE THE COMPANY.



SECURITY

CRYPT-ONE ALLOWS TO SECURE ANY PRODUCT USING SECURE AUTHENTICATION METHODS. IN ADDITION, IT IS FULLY RESISTANT TO TIMING ATTACKS, AND USED SECURITY MEASURES COUNTERACT SIDE CHANNEL ATTACKS.



MILITARY

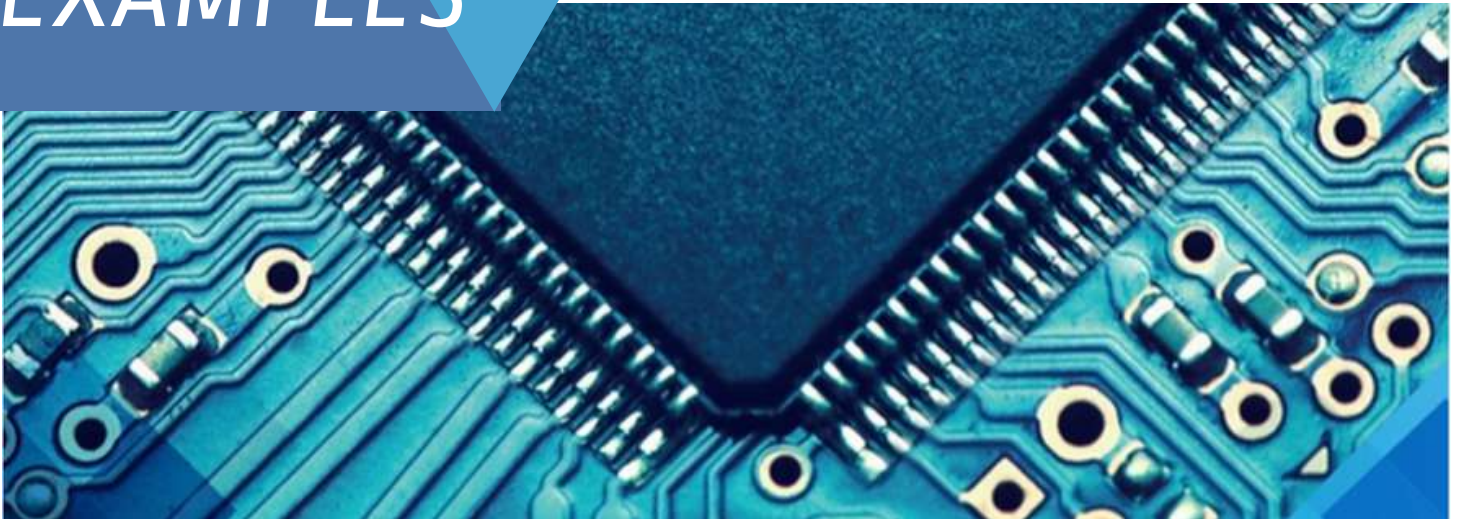
IN BOTH CLASSIC DIMENSION AND ONE RELATED TO CYBER SECURITY - THE MILITARY PLAYS A KEY ROLE IN ENSURING SECURITY. THE USE OF TESTED, AND AT THE SAME TIME, FULLY PROPRIETARY AND UNIQUE SOLUTIONS DESIGNED IN POLAND, SIGNIFICANTLY INCREASES THE LEVEL OF SECURITY OF USED AS WELL AS DESIGNED SOLUTIONS.



COMMUNICATION

MODERN AUTOMOTIVE INDUSTRY USES ADVANCED ELECTRONIC SYSTEMS. ON THE ONE HAND, THOSE SYSTEMS PROVIDE THE DRIVER AND PASSENGERS WITH THE HIGHEST LEVEL OF COMFORT AND SAFETY. EACH CHIP, HOWEVER, IS A POTENTIAL PICKLOCK FOR A THIEF. THEREFORE, DCD CAN INTEGRATE ITS OWN CAN AND LIN INTERFACES LAYERS WITH THE UNIQUE CRYPT-ONE CRYPTOGRAPHIC LAYER.

EXAMPLES



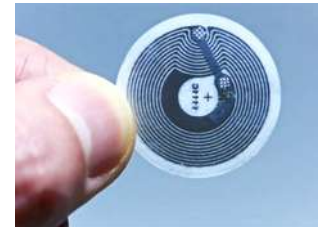
NFC

- connection to the NFC module ensures fast and secure wireless connectivity
- full compatibility with ISO 7816-3: 2006 and EMV 4.1 standard
- the only solution on the market compliant with the PSD2 guidelines on the latest legal changes regarding safer and more innovative European payments services - see Directive (EU) 2015/2366



PAYMENT CARDS

- CryptOne provides the ability to log into electronic banking without text messages or tokens - just waive the card
- create a new generation of payment cards - with an unprecedented one-time hardware key system
- the possibility of integration not only with NFC, but also with blockchain, thanks to which payment transactions will reach a new dimension of security



AUTHENTICATION

- Crypt-One is a complete cryptographic system that allows unambiguous identification of any product
- Dedicated server or Peer 2 Peer
- Full control at every stage of implementation
- Customizable components
- Dedicated smartphone application

CONTACT DCD