

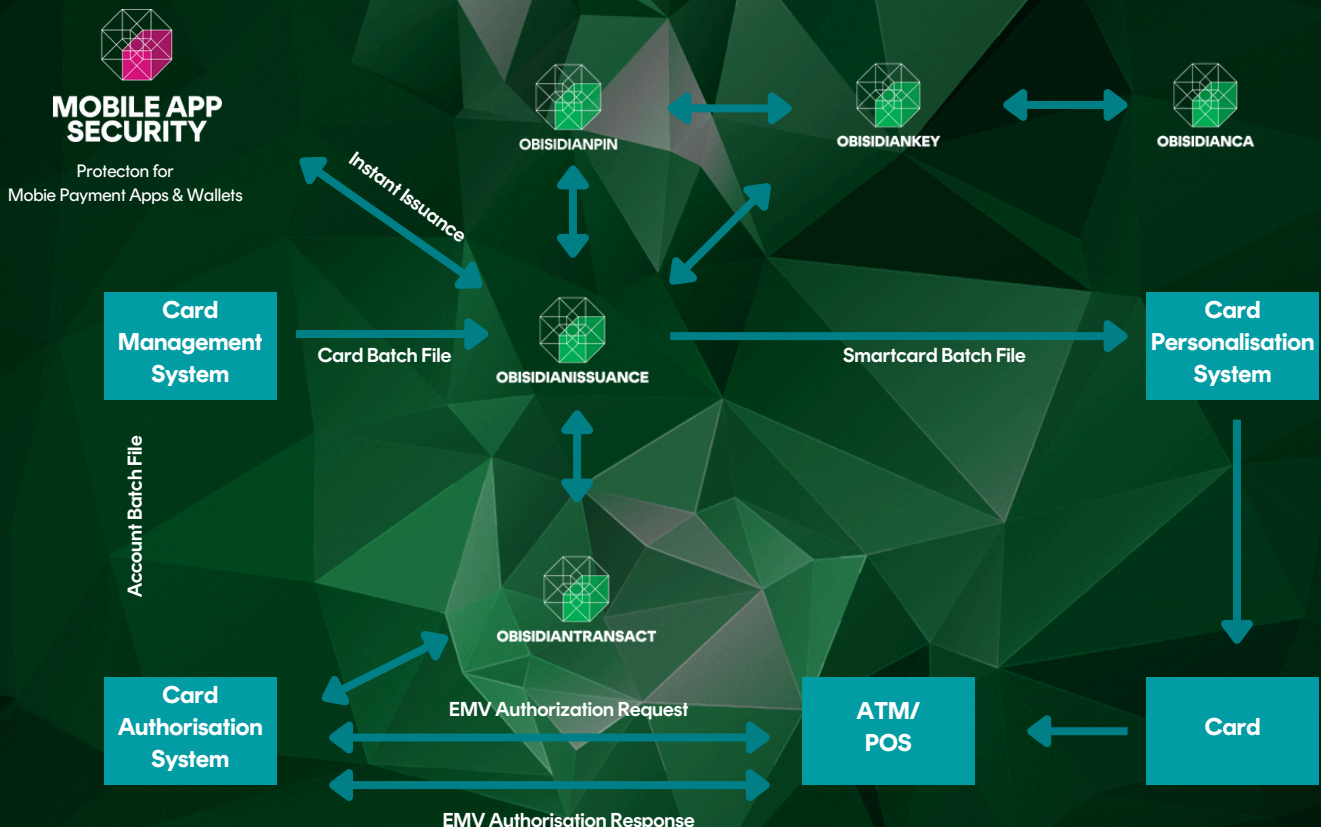
OBSIDIAN PRODUCT SHEET



OBSIDIAN IS A MODERN ISSUER PAYMENT PLATFORM PROVIDED BY CRYPTOMATHIC. IT ADDRESSES THE MODERNIZATION AND INNOVATION CHALLENGES THAT PAYMENT SCHEMES, ISSUERS, PROCESSORS, AND FINTECH'S ARE FACING IN THE ISSUER PAYMENT ECOSYSTEM:

- Manage growing payment card portfolios, being virtual, physical or both
- Authorize an increasing number of payment transactions, detect fraud, and manage risk
- Migrate payment applications and systems to the cloud to reduce overall cost and increase flexibility and time to market
- Offer new innovative financial services to a more demanding younger customer base
- Develop highly secure mobile payment applications and payment wallets
- Support new payment methods accepted by merchants
- Manage an increasing number of EMV cryptographic keys (CA certificates, Issuer master keys, issuer certificates, transport keys...)
- Stay compliant with the different payment regulations and PCI standards

THE PLATFORM



OBSIDIAN

PRODUCT SHEET



OBSIDIAN IS A MODULAR PLATFORM THAT OFFER MULTIPLE BACK-END FUNCTIONS THAT CAN BE DEPLOYED AS NEEDED.

THE MAIN MODULES ARE:

Card Issuance:

- Manage payment card lifecycle, from first issuance to replacement
- Issue any EMV payment cards, virtual or physical
- Integrate with different personalization software for personalization of physical cards
- Instant issuance or by batch
- EMV, VISA, Mastercard, contact, contactless, flex/fuel cards...

PIN Management module:

- All PIN functions related to payment cards
- PIN generation and secure storage in ISO formats
- Offer PIN selection and PIN change for users via multiple channels (web/mobile app)
- Support electronic PIN delivery or traditional PIN Mailers

EMV Authorization

- Process EMV authorization processing received in payment transactions
- Manage EMV issuer scripts (block card, change PIN, update card)
- Manage EMV risk parameters associated to cards

EMV Certificate Authority

- Manage EMV CA certificates lifecycle
- Sign and distribute issuer certificates
- EMV, VISA, Mastercard and other formats

Payment Key management

- Manage all payment keys required for card issuance and card production
- Key life-cycle management in compliance with PCI best practices
- Multiple standard key block formats supported

All modules are fully integrated and interoperable for enhanced workflow and automation.

Additionally, the core back-end platform can be leveraged on the front-end with Cryptomathic Mobile Application Security Core SDK (see Cryptomathic MASC product). Issuers can develop their mobile banking application while focusing on the functions (e.g. integrating 3D Secure workflows) and user experience and relying on the high-security features and assurance provided by MASC:

- Secure storage and secure connectivity
- Application integrity protection, configuration data protection
- API and device assurance... etc

BENEFITS

- All issuer functions on a single platform: card issuance, PIN Management, transaction authorization and payment key management are the core modules provided on the platform
- Optimize cost and speed up your time to market: launch credit, debit, or prepaid card businesses in multiple countries, in weeks, with a single integration
- Flexible deployment models: support cloud, on premise and hybrid environments
- Trusted software: A high performance platform issuing more than 15 million cards each month for issuers across the world
- Simplify compliance with a single platform
- Integrated with our MASC SDK offering to issue secure mobile payment application