Návod na pripojenie prípravku
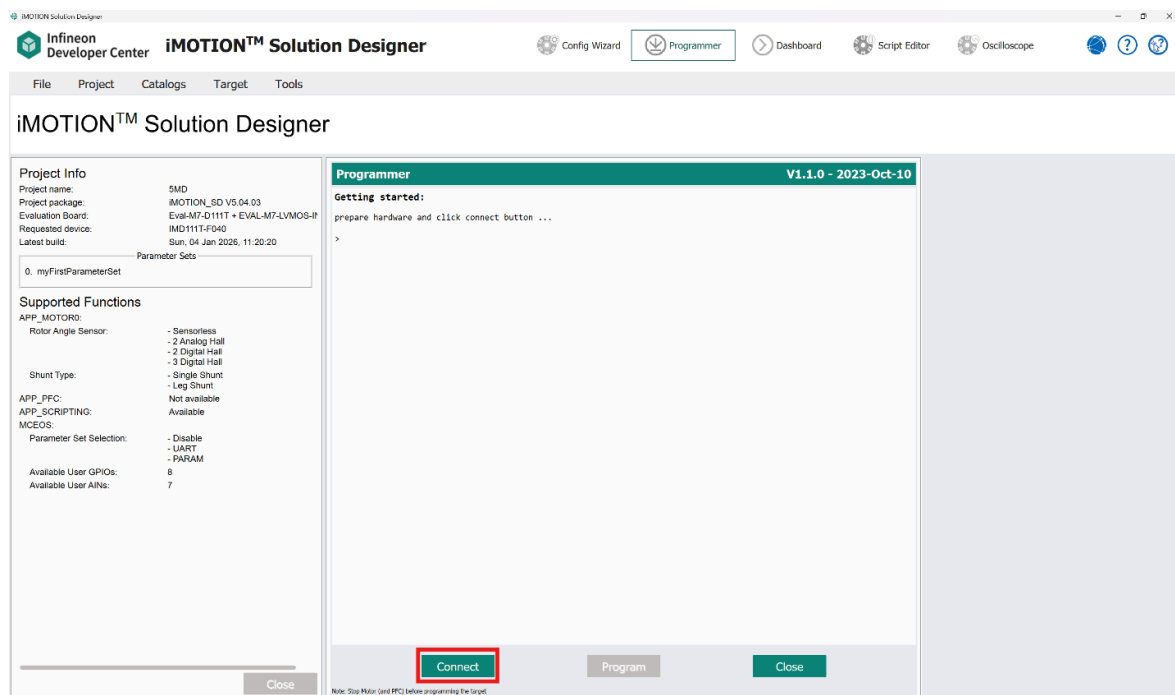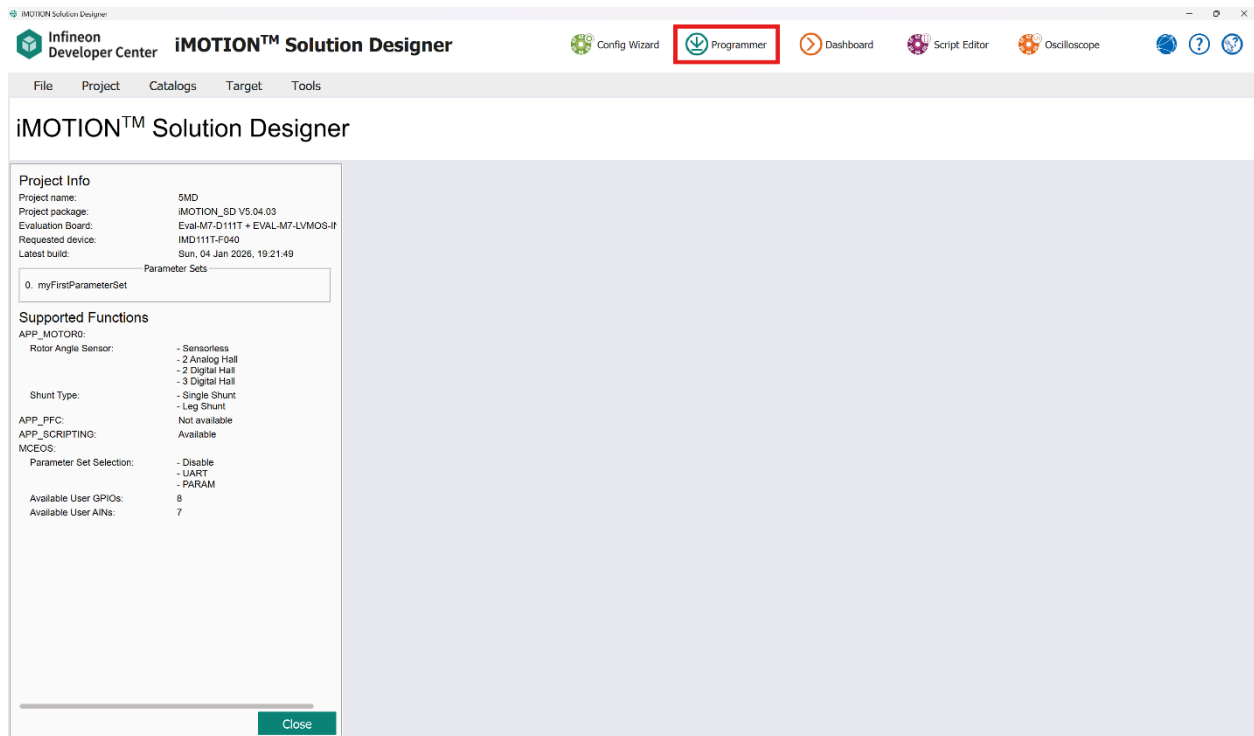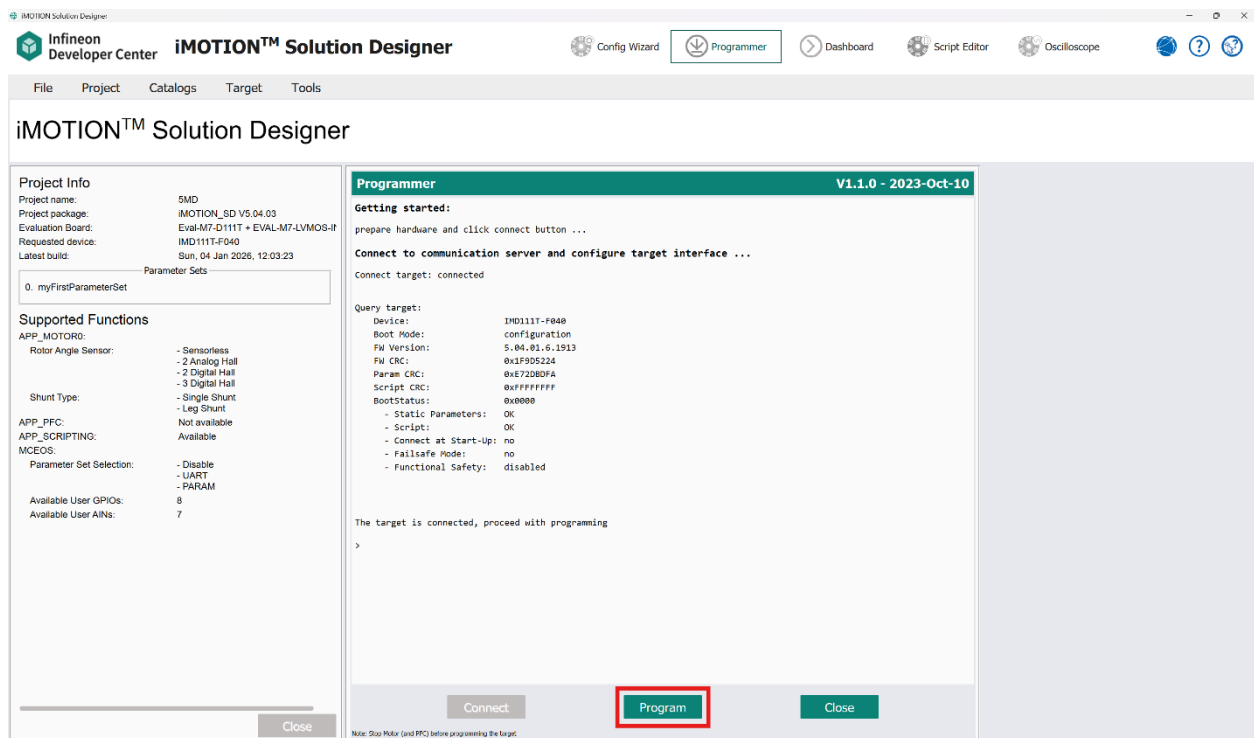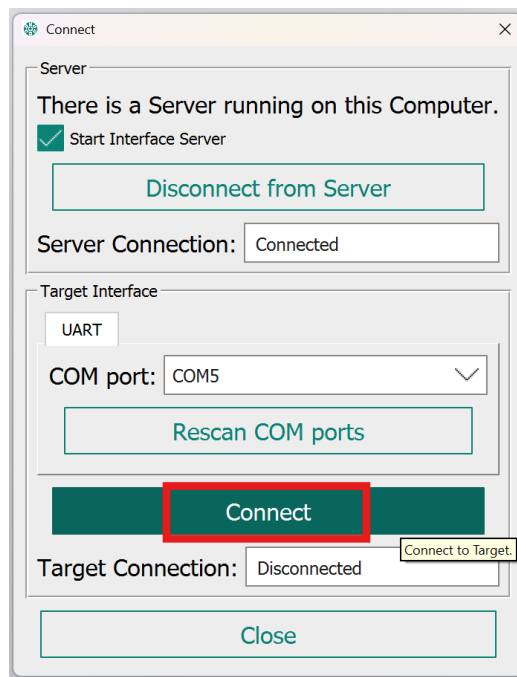
Konfiguračný súbor stiahnete na linku:

https://github.com/xchovanecm/5MD-electronics/tree/
83ef5e0b24d63cbb53c21cdaceceac4f081e6b0f/BLDC%205MD%20electronics

Pri otváraní programu zvoľte súbor BLDC 5MD electronics\settings\MOTOR.cwproj

Connect

Server

There is a Server running on this Computer.

☑ Start Interface Server

Disconnect from Server

Server Connection: Connected

Target Interface

UART

COM port: COM5

Rescan COM ports

Connect   Connect to Target.

Target Connection: Disconnected

Close

Infineon Developer Center   **iMOTION™ Solution Designer**

Config Wizard   Programmer   Dashboard   Script Editor   Oscilloscope

File   Project   Catalogs   Target   Tools

iMOTION™ Solution Designer

Project Info
Project name: 5MD
Project package: iMOTION_SD V5.04.03
Evaluation Board: Eval-M7-D111T + EVAL-M7-LVMOS-I
Requested device: IMD111T-F040
Latest build: Sun, 04 Jan 2026, 12:03:23

Parameter Sets
0. myFirstParameterSet

Supported Functions
APP_MOTOR0:
    Rotor Angle Sensor: - Sensorless
                            - 2 Analog Hall
                            - 2 Digital Hall
                            - 3 Digital Hall
    Shunt Type: - Single Shunt
                            - Leg Shunt
APP_PFC: Not available
APP_SCRIPTING: Available
MCEOS:
    Parameter Set Selection: - Disable
                                - UART
                                - PARAM
    Available User GPIOs: 8
    Available User AINs: 7

Close

Programmer   V1.1.0 - 2023-Oct-10

Getting started:

prepare hardware and click connect button ...

Connect to communication server and configure target interface ...

Connect target: connected

Query target:
    Device: IMD111T-F040
    Boot Mode: configuration
    FW Version: 5.04.01.6.1913
    FW CRC: 0x1F9D5224
    Param CRC: 0xE72DBDFA
    Script CRC: 0xFFFFFFFF
    BootStatus: 0x0000
      - Static Parameters: OK
      - Script: OK
      - Connect at Start-Up: no
      - Failsafe Mode: no
      - Functional Safety: disabled

The target is connected, proceed with programming

>

Connect   **Program**   Close

Note: Stop Motor (and PFC) before programming the target

Info

Download Parameters to target before switching to Dashboard?

Yes   No

Connect

Server

There is a Server running on this Computer.

☑ Start Interface Server

Disconnect from Server

Server Connection: | Connected

Target Interface

UART

COM port: | COM5 ▾

Rescan COM ports

Connect

Connect to Target.

Target Connection: | Disconnected

Close

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iMOTION Solution Designer

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Config Wizard | Programmer | Dashboard | Script Editor | Oscilloscope | ? |

File | Project | Catalogs | Target | Tools

FW: 5.04.01.6.1913.0x1f9d5224 | IMD111T-F040 |

Name	Refres	Value	Unit
⊞ APP_MOTOR0			
⊞ APP_PFC			
⊞ APP_Scripting			
⊞ APP_SYSTEM...			
⊞ MCE			
⊞ Global			

Parameter set select Config Wizard

myFirstParameterSet ▾

Motor Control

VF Diagnostics
Current Sense
Current Loop
Speed Loop
Angle Estimation
Starting
Hall Feedback

Hall Feedback

VF Diagnostics Parameters

	Actual value	Desired value
Motor Control Configuration > Control Modes		
Rotor angle feedback selection	Hall	Open Loop
Motor control mode	Speed Control	Voltage Control
Variables: Voltage tuning		
Vd_Ext	0.00 %	0.00 %
Vq_Ext	0.00 %	0.00 %
Variables: Speed tuning		
Target Speed	100.0 RPM	2000.0 RPM
Load > Power		
Minimum speed	100 RPM	100 RPM

Sync from Config Wizard | Update Target | Update Config Wizard

Open Oscilloscope

🔴 Motor Running
🟢 Target Connected

CPU Load
100
80
60 — 33.1 %
40
20
0
peak: 33.1 %

Target speed: | 100 RPM ⊕

Motor Rotation:
◉ Clockwise
○ Counter Clockwise

Start Motor
Stop Motor
Clear Fault
Clear peak

System Faults
🟢 Execution
🟢 Parameter Load
🟢 Link Break

Motor Control Faults
🟢 GateKill
🟢 Critical Over voltage
🟢 Over voltage
🟢 Under voltage
🟢 Flux
🟢 GKPIN
🟢 Overheat
🟢 Rotor Lock
🟢 Phase Loss
🟢 Current Offset
🟢 Hall Timeout
🟢 Hall Invalid

Runtime: 323 seconds

Get parameter | Save parameter | Clear refresh | Find parameter | Expand