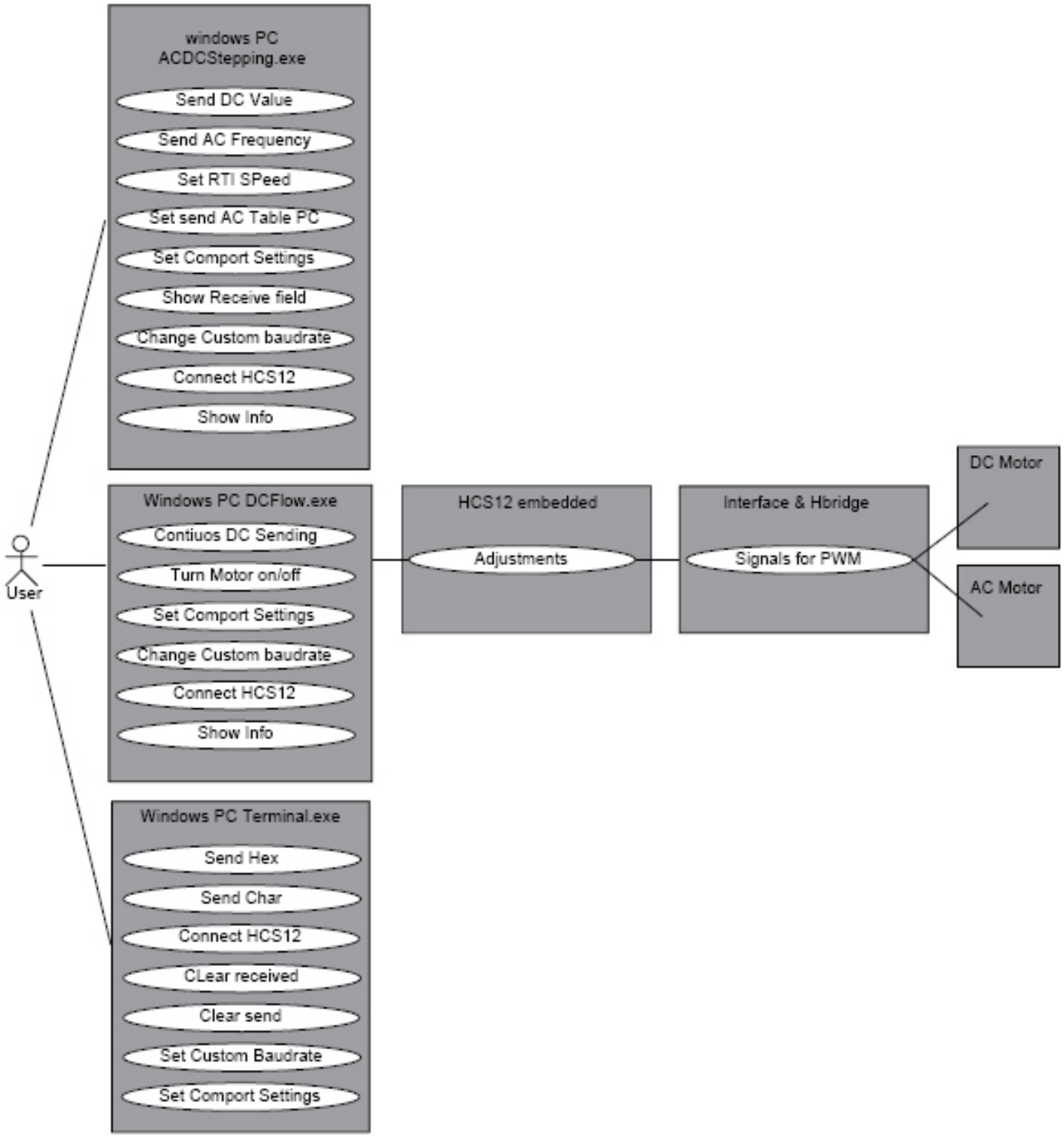
DCFlow.exe

Case Diagram

Universal Motor Driver

Case Diagram of C++ Builder 6 Software



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DCFlow.exe

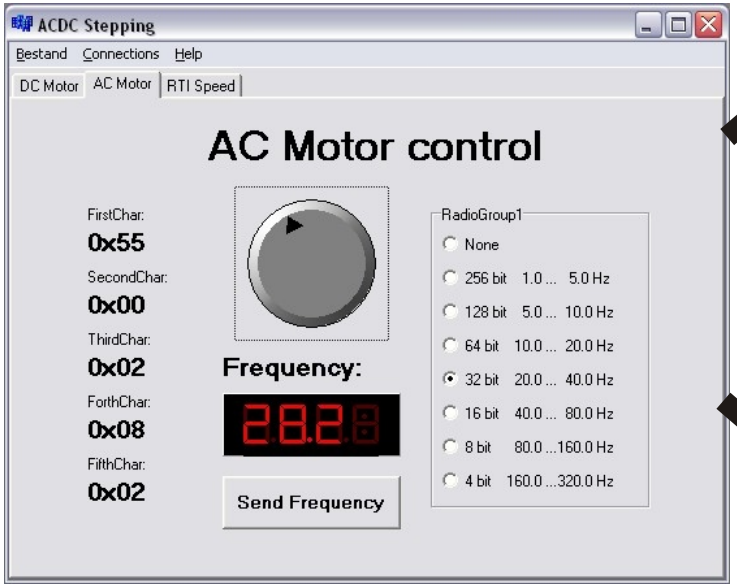
Screendumps

Universal Motor Driver

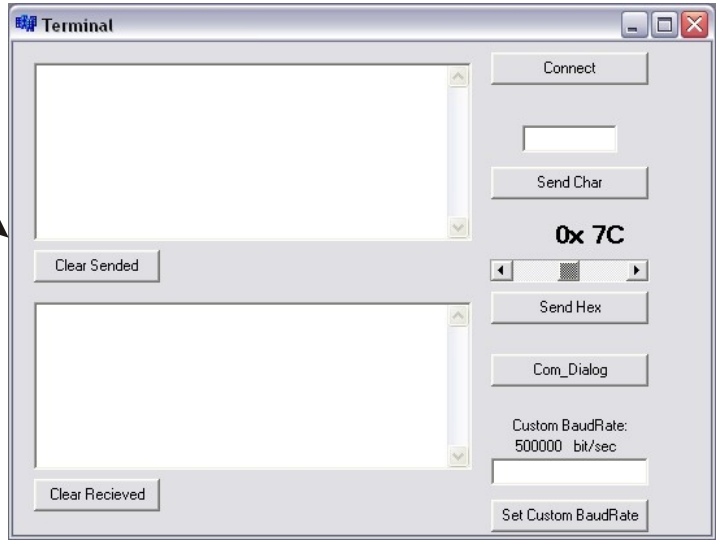
C++ Builder 6 programs accessibility

DCFlow.exe

ACDCStepping.exe



Terminal.exe



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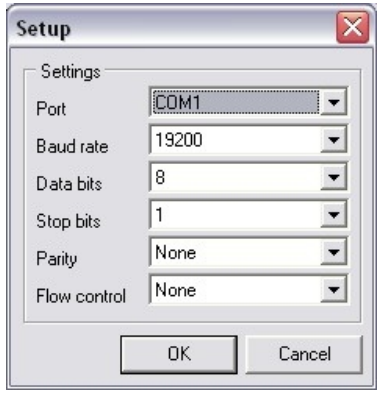
DCFlow.exe

Unit1.cpp

Unit2.cpp

Unit3.cpp



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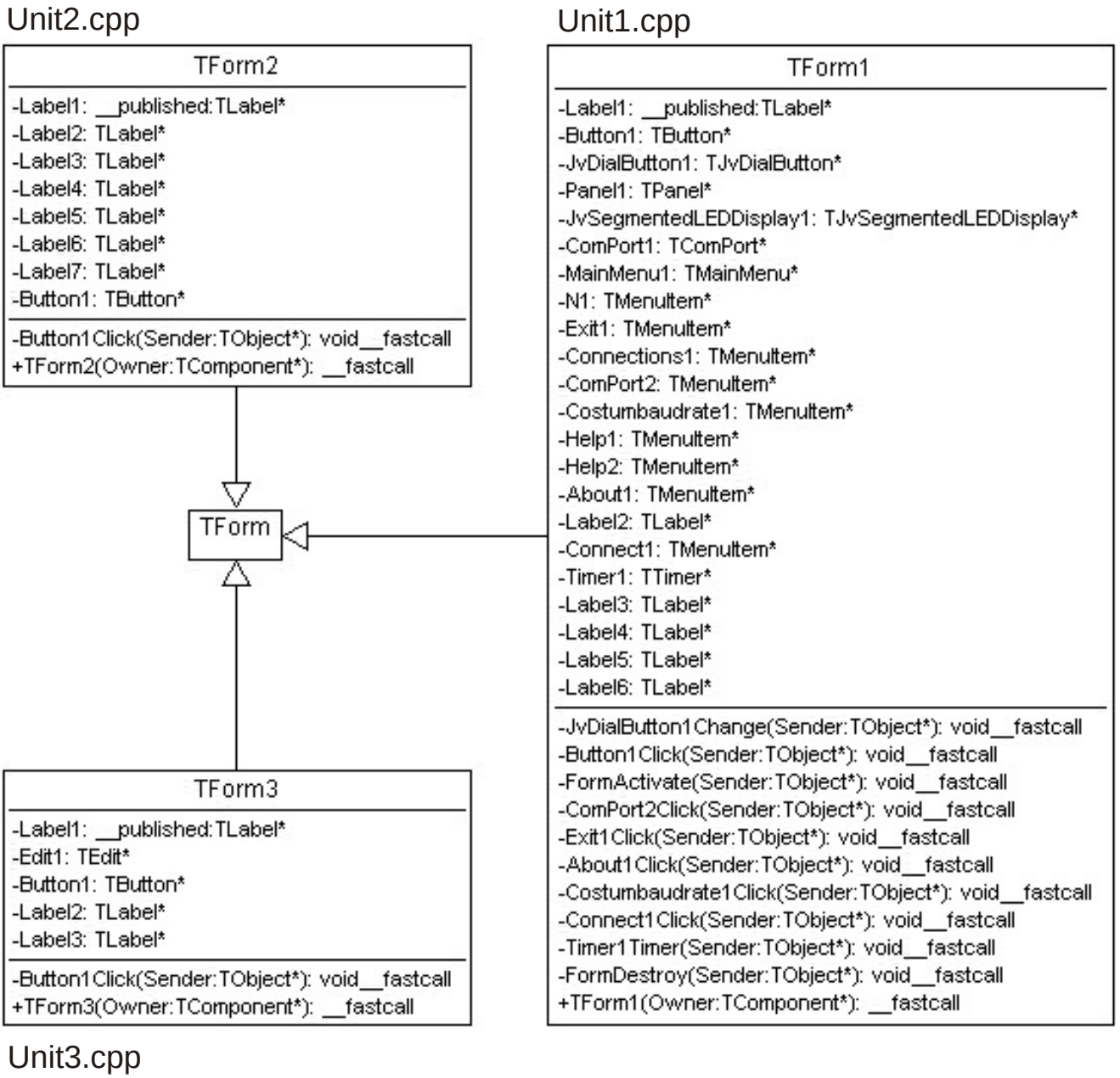
DCFlow.exe

Classes Diagram

Universal Motor Driver

Classes Diagram of DCFlow.exe

DCFlow.exe



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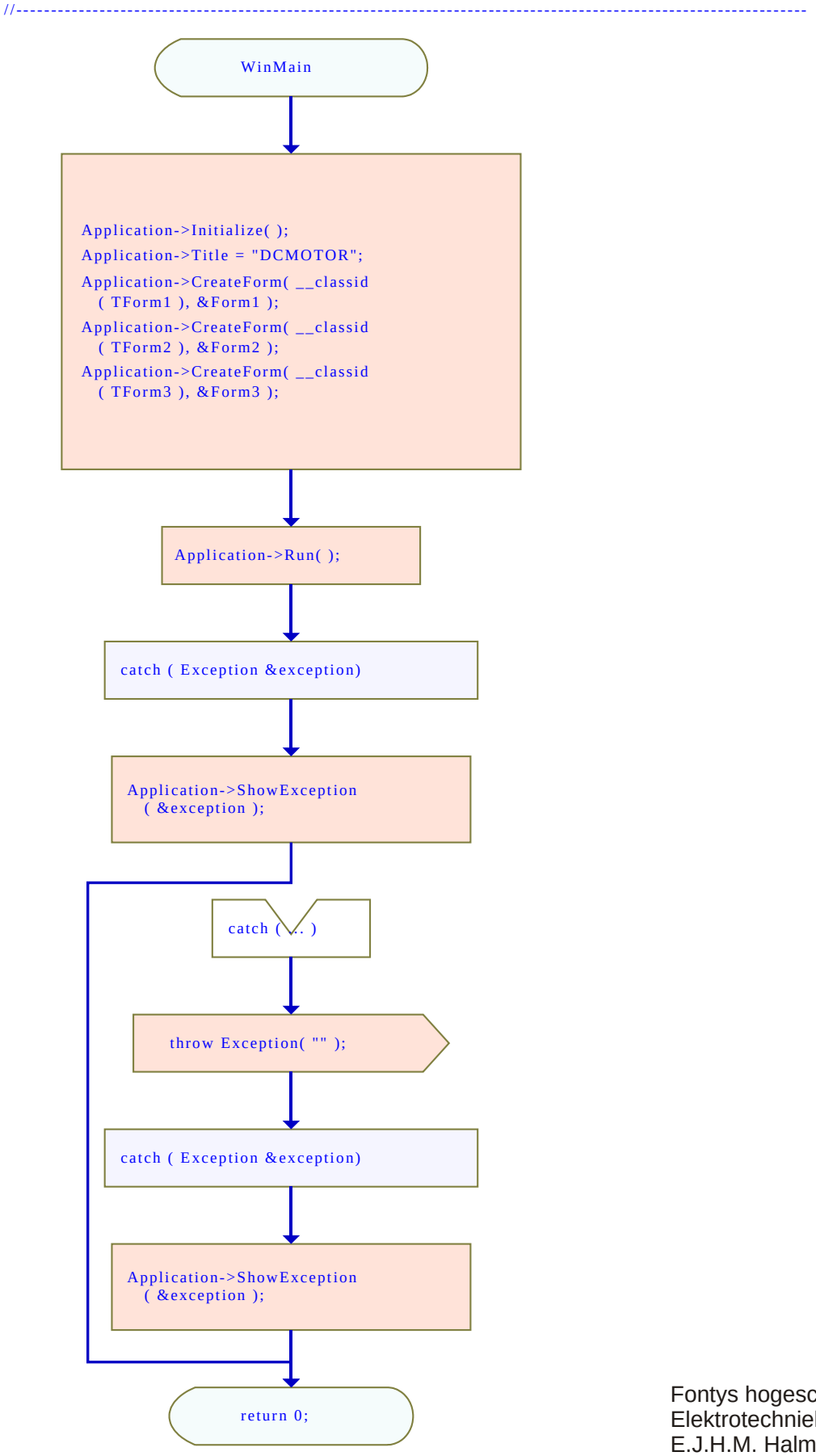
DCFlow.exe

Flowdiagram ACDCStepping.cpp

Universal Motor Driver

- **WinMain**

Flow Diagram of DCFlow.exe
DCFlow.cpp function: WinMain



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DCFlow.exe

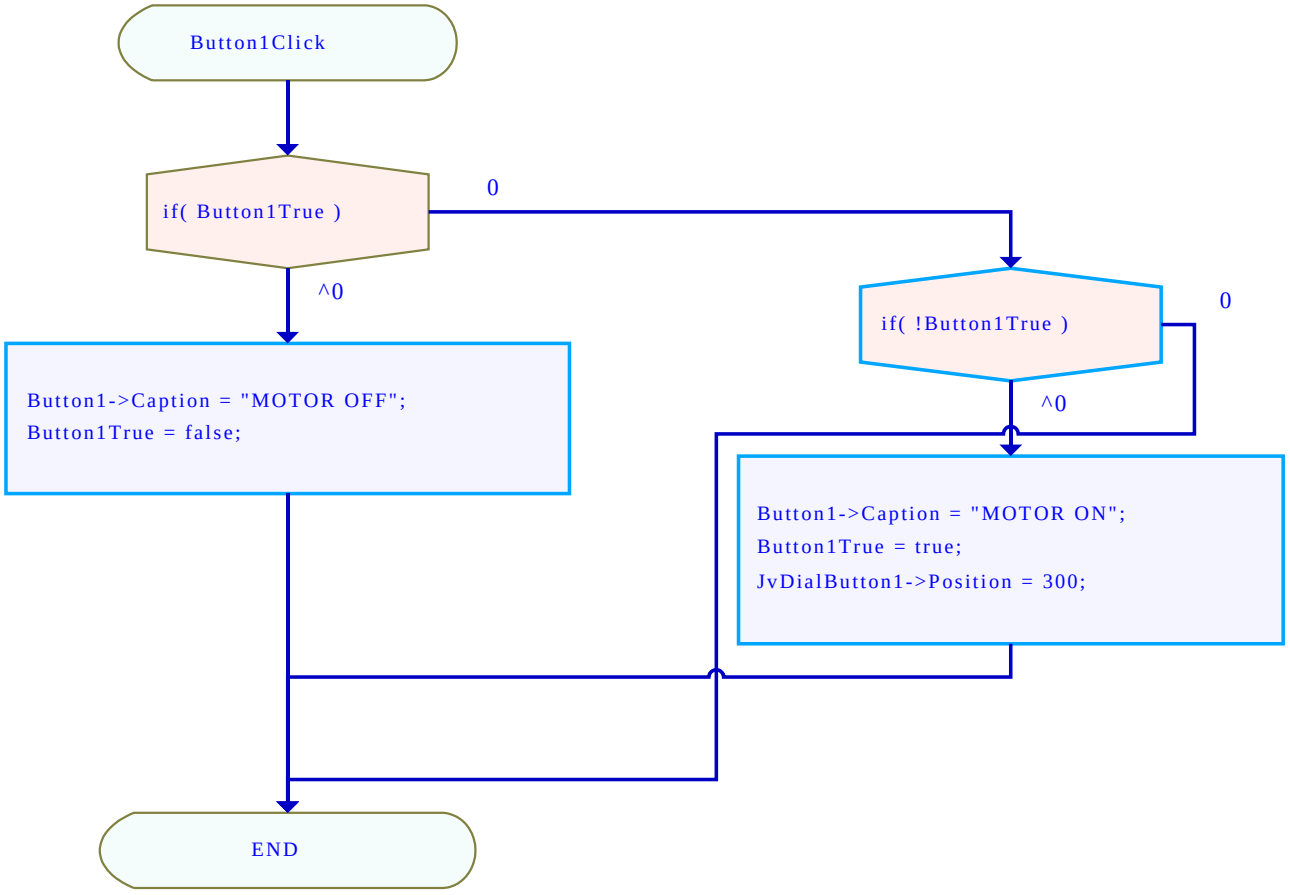
Flowdiagram
Unit1.cpp

Universal Motor Driver

- **Button1Click**
- **ComPort2Click**
- **Connect1Click**
- **Costumbaudrate1Click**
- **FormDestroy**
- **JvDialButton1Change**
- **Timer1Timer**

Flow Diagram of DCFlow.exe
Unit1.cpp function: Button1Click

```
//---------------------------------------------------------------------------------------------------
// Short description:
// When ever this button is clicked it sets the boolean Button1True either
// to be true or false. It also changes the caption according
// Pre: Button1True is true or false
//
// Post: If Button1True = false : Button1True -> true
// If Button1True = true : Button1True -> false
// Caption changes accordingly (Motor ON or Motor OFF)
//---------------------------------------------------------------------------------------------------
```



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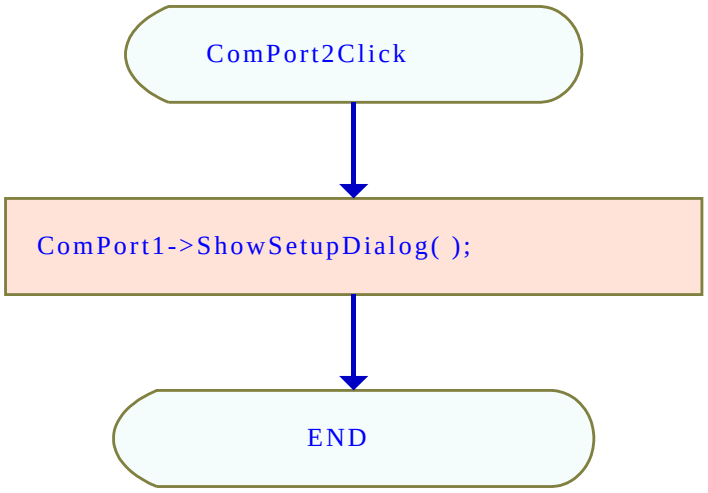
Flow Diagram of DCFlow.exe
Unit1.cpp function: ComPort2Click

```
//---------------------------------------------------------------------------
// Short description:
// Choosing this menu option, a setup dialog for the Comport VCL is shown.
// In this dialog, you can change:
// - Port number
// - Baudrate
// - Data bits
// - Stop bits
// - Parity
// - Flow control
// Pre: ComPort1
// Post: setup dialog shown and changes effect ComPort1
//---------------------------------------------------------------------------
```



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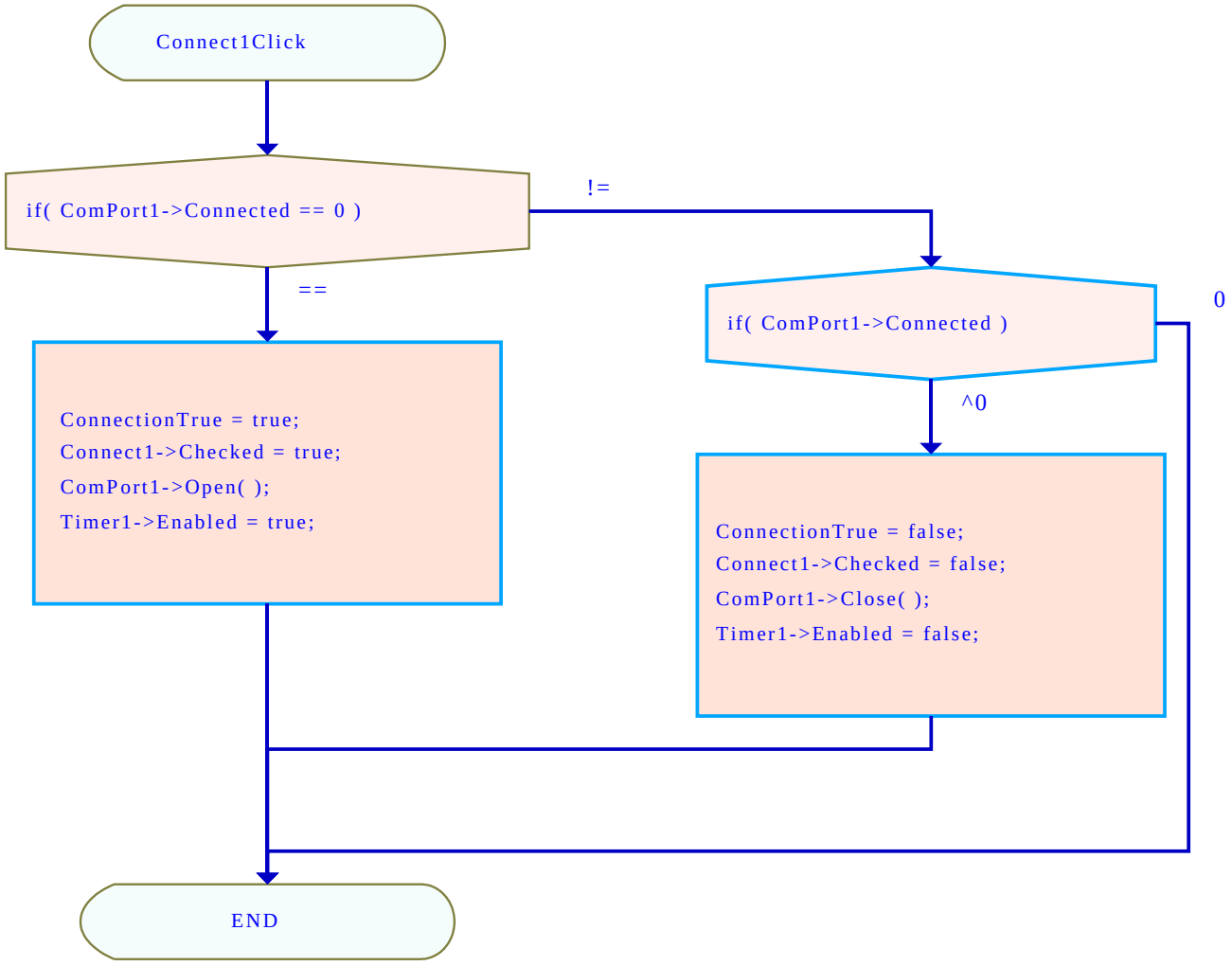
Flow Diagram of DCFlow.exe
Unit1.cpp function: Connect1Click

```
//---------------------------------------------------------------------------
// Short description:
// This menu option if checked opens a connection with the Comport VCL
// Pre: If Connect1 = Checked Comport is open
// If Connect1 = not Checked Comport is closed
// Post: If Connect1 was Checked Comport is now closed
// If Connect1 was not Checked Comport is now open
//---------------------------------------------------------------------------
```



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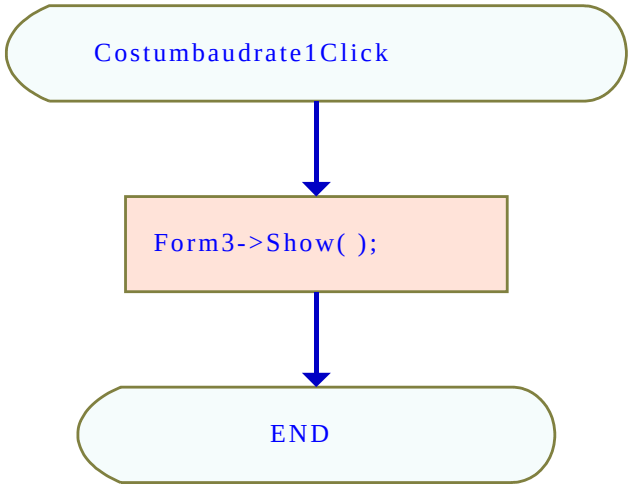
Flow Diagram of DCFlow.exe
Unit1.cpp function: Costumbaudrate1Click

```
//---------------------------------------------------------------------------
// Short description:
// Show set custom baud
// Pre: DCFlow.exe is running
// Post: On top of DCFlow.exe is the custom baud window shown
//---------------------------------------------------------------------------
```



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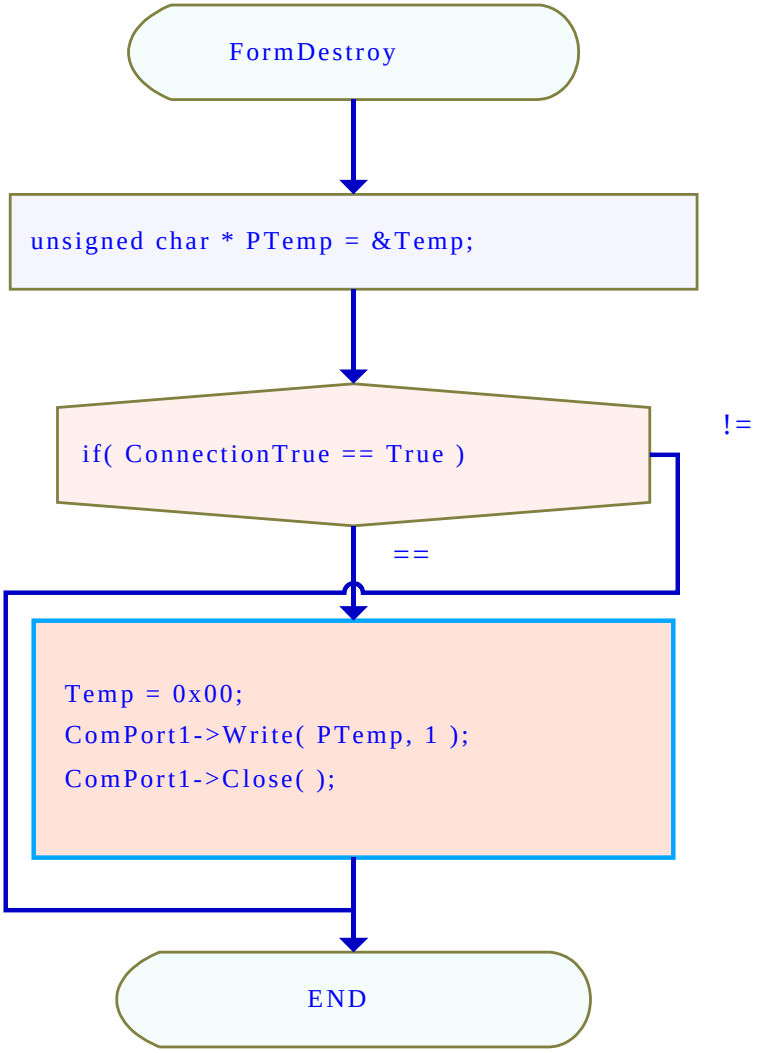
Flow Diagram of DCFlow.exe
Unit1.cpp function: FormDestroy

```
//---------------------------------------------------------------------------
// Short description:
// This function is entered when the program is terminated.
// Before termination it sends a stop character to the HCS12,
// if connected.
// Pre: Comport is connected or not
// Post: If connected: 0x00 stop char is send and Comport1 is closed
// If not connected: Comport1 is opened,
// 0x00 stop char is send and Comport1 is closed.
//---------------------------------------------------------------------------
```



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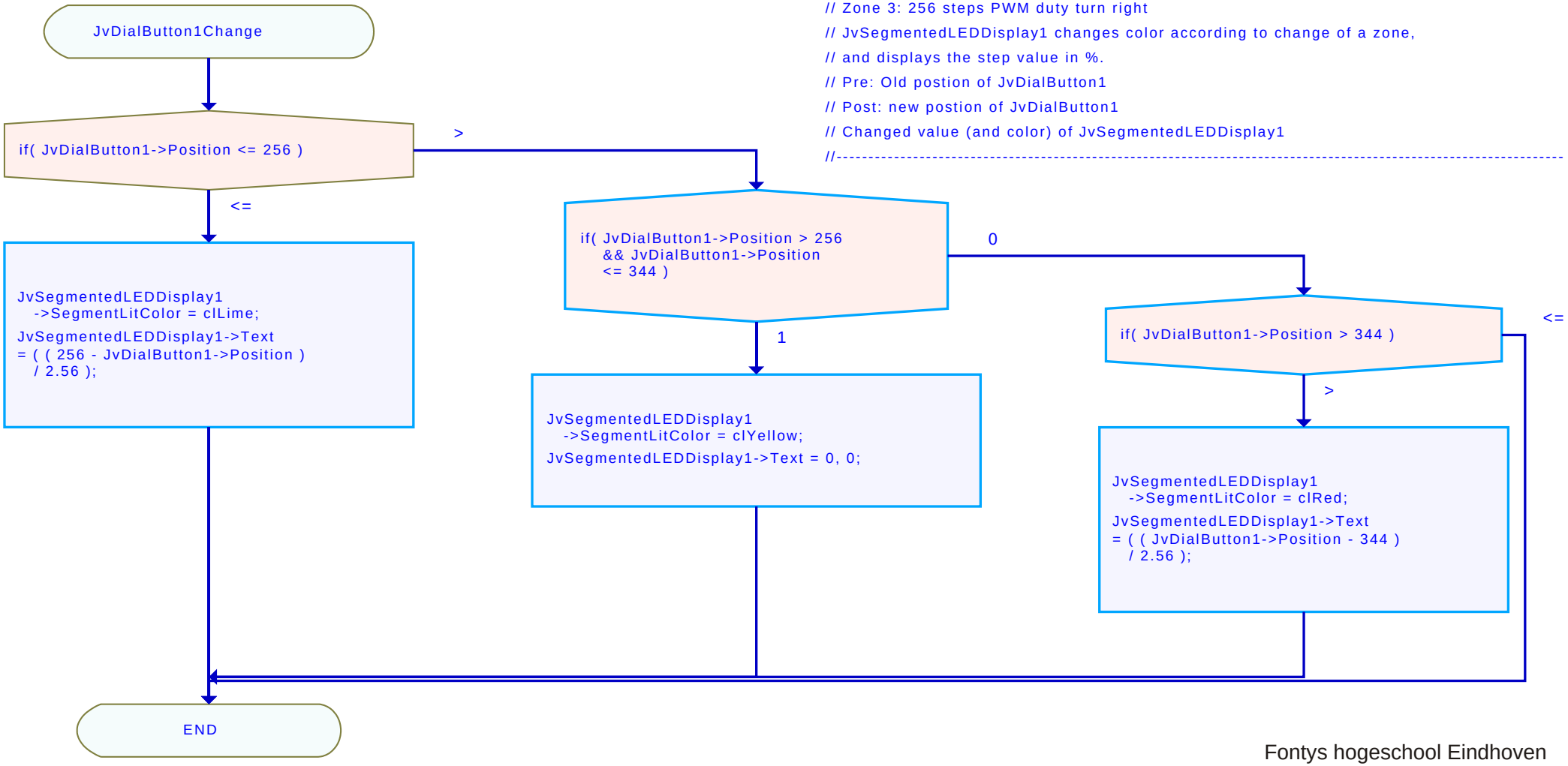
Flow Diagram of DCFlow.exe Unit1.cpp function: JvDialButton1Change

```
//---------------------------------------------------------------------------
// Short description:
// If JvDialButton1Change changes, JvSegmentedLEDDisplay1
// changes according to the dialbutton
// The dialbutton is divided in 3 zones,
// Zone 1: 256 steps PWM duty turn left
// Zone 2: Zero value zone
// Zone 3: 256 steps PWM duty turn right
// JvSegmentedLEDDisplay1 changes color according to change of a zone,
// and displays the step value in %.
// Pre: Old postion of JvDialButton1
// Post: new postion of JvDialButton1
// Changed value (and color) of JvSegmentedLEDDisplay1
//---------------------------------------------------------------------------
```



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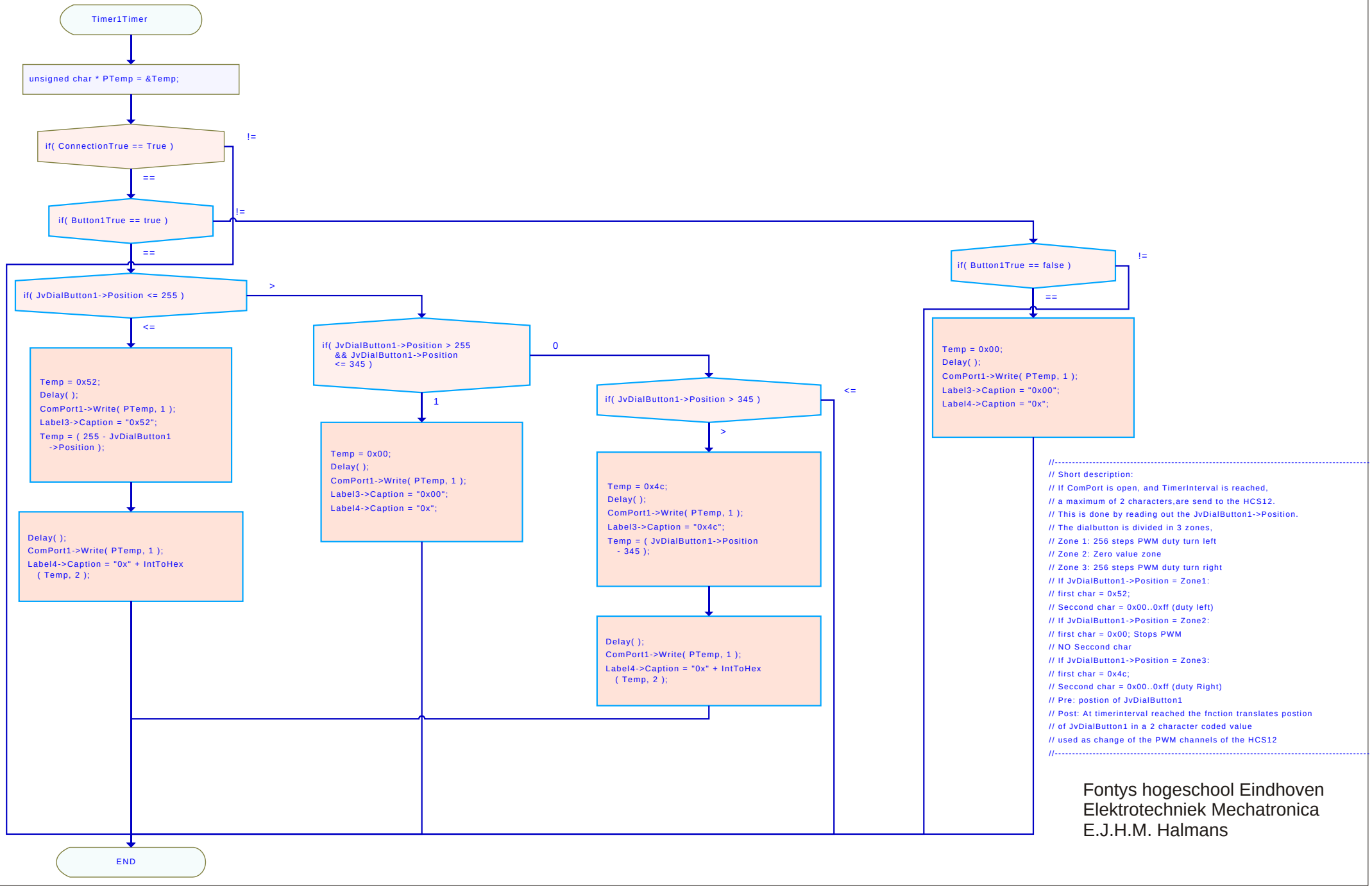
Flow Diagram of DCFlow.exe Unit1.cpp function: Timer1Timer




```
//---------------------------------------------------------------------------
// Short description:
// If ComPort is open, and TimerInterval is reached,
// a maximum of 2 characters,are send to the HCS12.
// This is done by reading out the JvDialButton1->Position.
// The dialbutton is divided in 3 zones,
// Zone 1: 256 steps PWM duty turn left
// Zone 2: Zero value zone
// Zone 3: 256 steps PWM duty turn right
// If JvDialButton1->Position = Zone1:
// first char = 0x52;
// Seccond char = 0x00..0xff (duty left)
// If JvDialButton1->Position = Zone2:
// first char = 0x00; Stops PWM
// NO Seccond char
// If JvDialButton1->Position = Zone3:
// first char = 0x4c;
// Seccond char = 0x00..0xff (duty Right)
// Pre: postion of JvDialButton1
// Post: At timerinterval reached the fnction translates postion
// of JvDialButton1 in a 2 character coded value
// used as change of the PWM channels of the HCS12
//---------------------------------------------------------------------------
```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DCFlow.exe

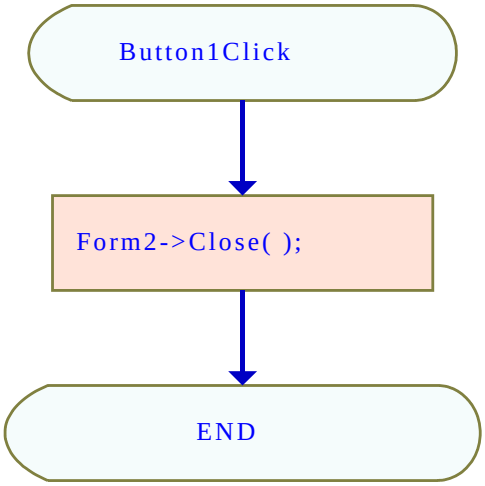
Flowdiagram
Unit2.cpp

Universal Motor Driver

- Button1Click

Flow Diagram of DCFlow.exe
Unit2.cpp function: Button1Click

```
//---------------------------------------------------------------------------
// Short description:
// Button to close about window
// Pre: about window is shown
// Post: about window is closed
//---------------------------------------------------------------------------
```



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DCFlow.exe

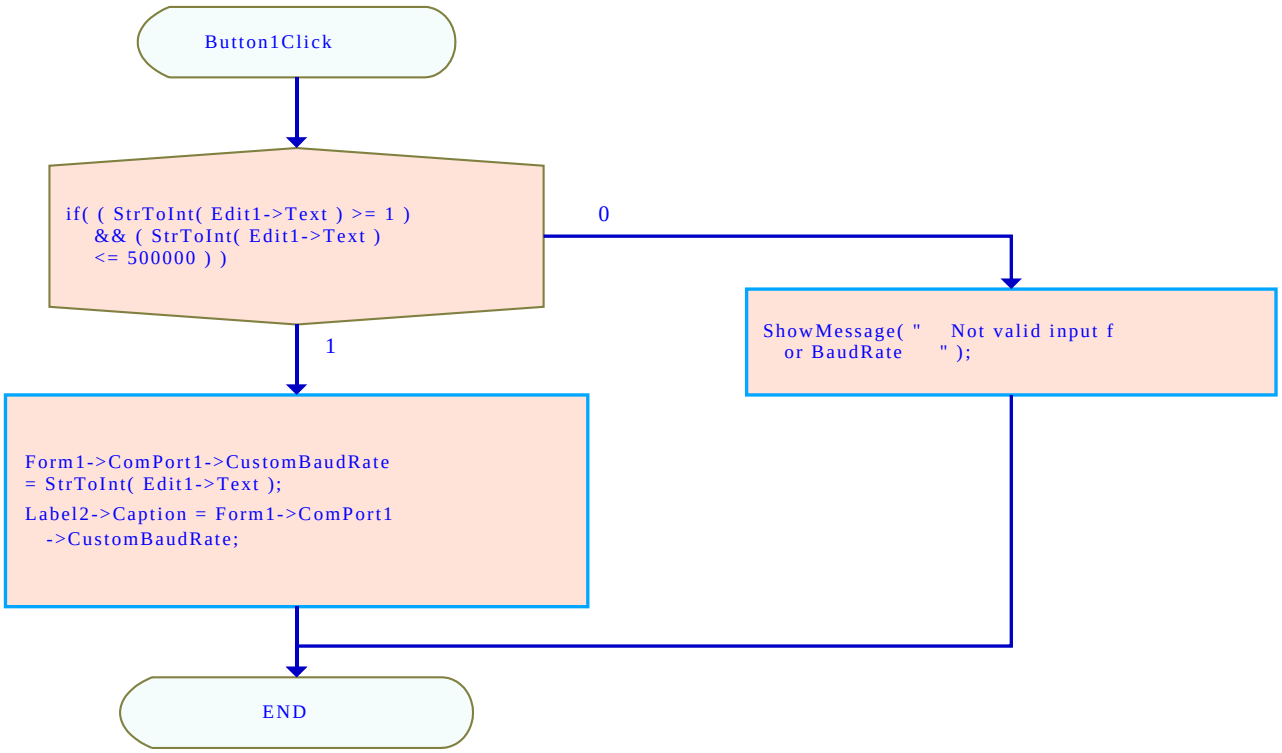
Flowdiagram
Unit3.cpp

Universal Motor Driver

- Button1Click

Flow Diagram of DCFlow.exe
Unit3.cpp function: Button1Click

```
//---------------------------------------------------------------------------
// Short description:
// Button to set CPort VCL Custom baudrate
// Pre: - CBaudRate->Text contains a value between 0..500.000
// - CustomBaudRate
// Post: The string value is translated in a integervalue and
// is used to set a new CustomBaudRate
// if buadrate is not within specs a non valid message is shown
//---------------------------------------------------------------------------
```



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