**Python-MATLAB (matlab.engine)**

Contents

[**Section 1- Basic Introduction** 3](#_Toc134099002)

[**Section 3- CAN Message Frame Structure** 3](#_Toc134099003)

[**3.2 Extended CAN Protocol for Data and Remote Frame-** 3](#_Toc134099004)

[**References** 3](#_Toc134099005)

Table of Figures

# No table of figures entries found.

# **Section 1- Basic Introduction**

CAN is Controller Area Network. It is a two-wire, half duplex, high-speed network system, serial communication protocol.

1. They support message of length more than 8 bytes
2. They provide network management( i.e. network start-up, node monitoring, node synchronization)
3. Sometimes systems may require master slave configuration

# **Section 3- CAN Message Frame Structure**

All messages in CAN are referred as Frames. Information sent by the CAN with different frames must be compliant with defined frame formats of **different but** **limited length**. Mainly four frames are present in CAN which are:-

1. **Data Frame** – Data transfer from one to many receiving nodes.
2. **Remote Frame** – Request of Data from one node to another node, it is followed by the Data frame consisting required data.
3. **Error Frame** – Bus participant, receiver or transmitter can signal error condition at any time during data or remote frame transmission.
4. **Overload Frame** – Node requesting delay between data or remote frames as requiring time for processing.

## **3.2 Extended CAN Protocol for Data and Remote Frame-**

Generally used for off-road vehicles. ISO 11898 amendment was created in 1995 to support extended CAN protocol.

Trade off for extended CAN

# **References**

Installation reference

<https://www.mathworks.com/help/matlab/matlab_external/install-the-matlab-engine-for-python.html>

Calling MATLAB from Python | MATLAB and Python Together,

Part 1: - <https://www.youtube.com/watch?v=TQOEcUdw9Wk>

Part 2: - <https://www.youtube.com/watch?v=MzoFK0_UbOA&list=RDCMUCgdHSFcXvkN6O3NXvif0-pA&start_radio=1&rv=MzoFK0_UbOA&t=597>