

ABSTRACT

DATA PROCESSING SYSTEM AND METHOD SUPPORTING TRIGGER COMMUNICATION

An objective of the present invention is to provide a data processing system and method supporting trigger communication, which can implement periodic communication and execute commands step by step. The method includes the following steps: making a configuration based on a user requirement, and generating a command control word and a command sequence number corresponding to a trigger communication command; periodically issuing, by a controller, real-time data to a master station or a client based on the configuration; monitoring, by the master station or the client, the real-time data issued by the controller, and determining, based on the command control word, whether an output of the trigger communication command is allowed; receiving, by the master station or the client, response data in executing the trigger communication command by a controlled device, parsing the response data, and feeding back a parsed command execution sequence number and command execution status to the controller; and monitoring, by the controller during waiting for a command response, data fed back from the master station or the client, and determining, based on the command execution sequence number, whether to calculate and display a response result of an external controlled device.

Figure 1