DK8051VoIP Message



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Specification & Scenario

Specification

DK8051VoIP supports 1:1 voice communication. In other words, it's possible to communicate with only one person using full-duplex voice communication.

Scenario

- 1) Client (PC Applicaton "iiVoice") make a TCP connection to DK8051VoIP
- 2) Transfers full-duplex voice data (REQ_FULL) to each other
- 3) If possible for DK8051VoIP to do full-duplex voice communication
 - Reply with ACK_FULL|CALLINDEX, make a voice channel and close TCP connection
 - If impossible, Reply with NACK_FULL|OVER and close TCP connection
 - After TCP close, wait in Control Channel listen state
- 4) After confirming TCP Control Channel close, create voice channel
- 5) Start full-duplex voice communication
- 6) Terminate voice communication
 - Client transfers a termination of voice communication message (REQ_END|CALLINDEX) after making a TCP connection to DK8051VoIP
 - DK8051VoIP changes its state into TCP Listen state and closes voice communication channel after sending ACK_END and closing TCP connection. And client confirms TCP Close and close voice communication channel

DK8051VoIP Message



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Message Definition between Client and DK8051VolP

- Definition of DK8051VoIP Control Message
 - Definition of Message

Every control message is working in the hand-shaking every message transaction



Message Structure

KIND (Message Type) - 1 Byte	DATA (Data related to message type) : 2 Bytes
123~255 : DK8051VoIP Control Mesage	Additional information needed by each message

- Detailed definition of message

1) REQ_FULL : Request for full-duplex voice communication

KIND	DATA
123	NO DATA

NO DATA : No data to transfer. Use –9999 in stead of NULL character

2) ACK_FULL : Response to "REQ_FULL" when voice communication service can use

KIND	DATA
124	CALL INDEX

3) NACK_FULL : Response to "REQ_FULL" when voice communication service can't use

KIND	DATA
125	CALL INDEX, OVER

OVER(8888) : No available channel to service

4) REQ_END : Request for termination of voice communication

KIND	DATA
133	CALL INDEX

5) ACK_END : Success in termination of voice communication

KIND	DATA
134	CALL INDEX

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Definition of Channel Port

- Socket Port Number of Client and DK8051
 - TCP Control Listen port number : 43210
 - UDP Voice Communication port number : 43220

