

Connection Control Block structure

```
#include <ADSP.h>
```

```
typedef struct TRCCB {
    TPCCB      *ccbLink;      Size  Offset  Description
    short      refNum;        4      0      Address of next CCB
    short      state;         2      6      Volume reference number
    short      state;         2      8      Driver reference number
    char       userFlags;     1     10      User flags for connection
    char       localSocket;   1     11      Local socket number
    AddrBlock  remoteAddress; 4     12      Remote end internet address
    short      attnCode;      2     16      Attention code received
    short      attnSize;      2     18      Size of attention data
    Ptr        attnPtr;       4     22      Pointer to attention data
    unsigned char reserved; 220    26      Reserved for use by .ADSP
} TRCCB;                                242
```

```
typedef TRCCB *TPCCB;
```

Notes: The internet address of the remote connection end is defined in the **CCB** by the AddrBlock data type:

Field descriptions

ccbLink A pointer to the next **CCB**. This field is for use by **ADSP** only.

refNum The reference number of the **CCB**. This number is assigned by **ADSP** when you establish the connection end.

state The state of the connection end, as follows:

sListening	1	The socket is a connection listening socket -that is, a socket that accepts ADSP requests to open connections and passes them on to a socket client. This state is ordinarily used only by connection servers.
sPassive	2	The socket client is inactive but capable of accepting an ADSP request to open a connection. Unlike a connection listening socket, which passes the open-connection request on to a routine that can establish the connection on any socket, a socket client in the sPassive state can accept an open-connection request only to establish itself as a connection end.
sOpening	3	The socket client has sent an open-connection request and is waiting for acknowledgment.
sOpen	4	The connection is open.
sClosing	5	The socket client has requested that

ADSP close the connection, and **ADSP** is sending data or waiting for acknowledgment of data it has sent before closing the connection.

sClosed	6	The connections closed.																		
userFlags	<p>Flags that indicate an unsolicited connection event has occurred. An unsolicited connection event is an event initiated by ADSP or the remote connection end that is not in response to any .DSP routine that you executed. Each time an unsolicited connection event occurs, ADSP sets a flag in the userFlags field of the CCB and calls the routine you specified in the userRoutine parameter to the dspInit routine (if any). The user routine must read the userFlags field and then clear the flag to 0. ADSP cannot notify your routine of future events unless you clear the flag after each event. ADSP recognizes four types of unsolicited connection events, one corresponding to each of the flags in this field. The events and flags are defined as follows, where bit 7 is the most significant bit:</p> <table> <tr> <th>Event</th><th>Flag bit</th><th>Meaning</th></tr> <tr> <td>eClosed</td><td>7</td><td>ADSP has been informed by the remote connection end that the remote connection end has closed the connection.</td></tr> <tr> <td>eTearDown</td><td>6</td><td>ADSP has determined that the remote connection end is not responding and so has closed the connection.</td></tr> <tr> <td>eAttention</td><td>5</td><td>ADSP has received an attention message from the remote connection end.</td></tr> <tr> <td>eFwdReset</td><td>4</td><td>ADSP has received a forward reset command from the remote connection end, has discarded all ADSP data not yet delivered-including the data in the local client end's receive queue-and has resynchronized the connection.</td></tr> <tr> <td>none</td><td>3-0</td><td>Reserved.</td></tr> </table>		Event	Flag bit	Meaning	eClosed	7	ADSP has been informed by the remote connection end that the remote connection end has closed the connection.	eTearDown	6	ADSP has determined that the remote connection end is not responding and so has closed the connection.	eAttention	5	ADSP has received an attention message from the remote connection end.	eFwdReset	4	ADSP has received a forward reset command from the remote connection end, has discarded all ADSP data not yet delivered-including the data in the local client end's receive queue-and has resynchronized the connection.	none	3-0	Reserved.
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localSocket	The socket number through which DDP transmits and receives the ADSP packets.																			
remoteAddress	The internet address of the socket used by the remote connection end.																			
attnCode	The attention code received by ADSP when the remote connection end sends an attention message.																			
attnSize	The size of the attention message received by ADSP when the remote connection end sends an attention message.																			
attnPtr	A pointer to a buffer containing the attention message received by ADSP from the remote connection end.																			
reserved	A data buffer reserved for use by ADSP .																			