A Sideband MSG packet consists of a Sideband_MSG_Header and a Sideband_MSG_Body. The Sideband MSG packet must be less than or equal to 48 bytes. The Sideband_MSG_Header contains addressing information while the Sideband_MSG_Body contains the data to be transferred. The Sideband MSG packet is defined below.

Table 2-86: Sideband MSG Syntax

Syntax	No. of Bits

Sideband_MSG
{
    Sideband_MSG_Header()
    Sideband_MSG_Body()
}	

2.11.3.1 Sideband MSG Header()

The Sideband MSG header specifies which DP nodes are to process or receive the data of the Sideband MSG. The Sideband MSG header syntax is given below.

Table 2-87: Sideband MSG Header Syntax

Syntax	No. of Bits

Sideband_MSG_Header()
{
    Link_Count_Total
    Link_Count_Remaining
    for (i = 0; i < Link_Count_Total – 1; i++)
    {
      Relative_Address[i]
    }
    while (!bytealigned())
    {
      zero_bit
    }
    Broadcast_Message
    Path_Message
    Sideband_MSG_Body_Length
    Start_Of_Message Transaction
    End_Of_Message Transaction
    zero
    Message_Sequence_No
    Sideband_MSG_Header_CRC
}
	
	4
	4
	
	4
	
	1
	
	1
	1
	6
	1
	1
	1
	1
	4

2.11.3.1.1 Link_Count_Total (LCT)

Link_Count_Total is the total number of DP links a Sideband MSG traverses from message originator to message target. The maximum value for Link_Count_Total is 15. Therefore, the total number of physical and logical DP links is 15. The total number of physical DP links is limited to 7.

2.11.3.1.2 Link_Count_Remaining (LCR)

Link_Count_Remaining is the remaining number of DP links a Sideband MSG must traverse to reach the message target. The Link_Count_Remaining value is initialized to the Link_Count_Total value by the originator Sideband MSG layer. Along the message path, the µPacket TX device while forwarding the Sideband MSG decrements the Link_Count_Remaining value by one. The Link_Count_Remaining value is equal to Link_Count_Total – 1 when the message arrives at the first DP node from the message originator.

2.11.3.1.3 Relative_Address (RAD)