**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title | Resolution of LB225 comment index 188 |
| Date Submitted | 20 October 2025 |
| Source | Billy Verso (Qorvo),  | billy dot verso at qorvo dot com |
| Re: | IEEE P802.15.4ab |
| Abstract | Comment Resolutions for selected comments on the LB225 / P802.15.4ab D03, as captured in the consolidated comments spread sheet, DCN:15-25-0509. |
| Purpose | This document provides text changes intended to be part of the final IEEE Std 802.15.4ab (amendment to IEEE Std 802.15.4), as part of resolving selected comments that have been assigned to the author. |
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| Comments addressed here: |

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# Comment Index # 188

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| **Ind** | **pg** | **clause** | **line** | **Comment** | **Proposed Change** |
| 188(Alex) | 23 | 8.3.2.3  | 2 (Table 8-28) | This table only describes up to 8 RIF markers, but misses up to 16 RSF markers. | Duplicate the 4 rows of this table and rename "Rif" to "Rsf", "RIF" to "RSF", and change "Array of eight" to "Array of sixteen" in the resulting 4 additional rows. |

**Discussion:**

The commenter is asking for the ranging report to include timestamps for start and end of every RSF fragment, but if we look at UWB PHY clause 16.2.11 “*Multi-millisecond ranging packet format*”, on p.232, we can see that while there are multiple RMARKERs for the RIF fragments, there is just a single RMARKER for all RSF fragments. The relevant text is screenshot from D03 below along with the referenced figure, (red circles are added to highlight the RMARKER positions).





The *TxRangingCounter* and *RxRangingCounter* parameters of the *RangingReportDescriptor* are used to report the RMARKER transmission and reception times. Their definitions from the IEEE Std 802.15.4-2024 base standard, (from Table 8-28 on 138), are screenshot below:



In conclusion, while there are multiple RIF RMARKERs defined for the RIF fragments, only a single RMARKER is defined for the RSF fragments. Reporting the TX and RX timestamps for this RMARKER is already catered for in the base standard. Therefore, no change to the draft is necessary, and the proposed resolution then, is as follows:

**Proposed Disposition:** Rejected.

**Disposition Detail:**

No change to the 4ab draft is necessary. The draft (D03) specifies the RMARKER with respect to all RSF fragments in the MMS UWB packet (i.e. a single RMARKER) and reporting its transmit and receive times is already covered in the base standard, (using the TxRangingCounter and RxRangingCounter elements of the RangingReportDescriptor).

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