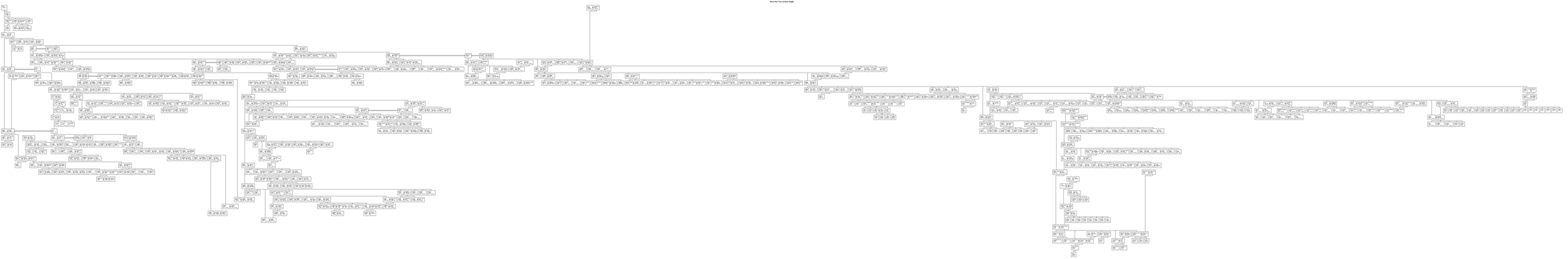All-to-One Tree of Mass Height