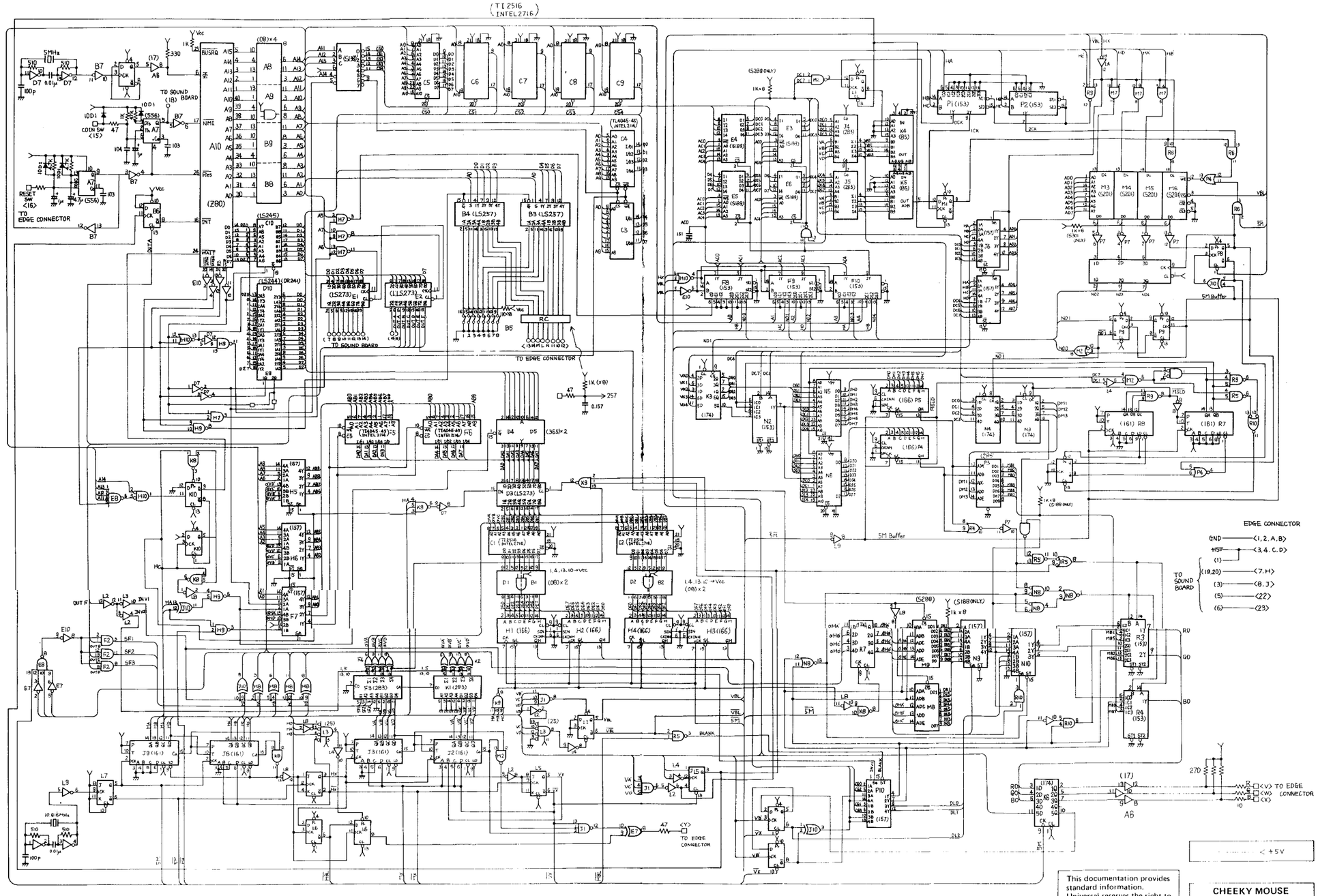MAIN BLOCK DIAGRAM