DEMOQE128_LAP_Dictionary Example Application User Guide

Introduction

DEMOQE128_LAP_Dictionary is an example for using the linear address space and linear address pointer in an application. This examples makes use of the Linear Address Pointer macros in the "mmu_lda.h" header file that comes standard with CodeWarrior for Microcontrollers V6.1 and later versions. This document describes how to set up and run the DEMOQE128_LAP_Dictionary example application.

Requirements

To run this software, you will need the following:

- DEMOQE128 board with the MC9S08QE128 daughter card installed
- USB cable
- PC with:
 - 1. CodeWarrior Development Studio V6.1 or later version
 - 2. P&E DEMOQE ToolKit

Setting up the Demo

The default jumper configurations should be used for the DEMOQE board

- 1. Open CodeWarrior for Microcontrollers. From Windows start menu you can locate it using the "Programs>Freescale CodeWarrior>CW for Microcontroller V6.0>CodeWarrior IDE.exe" path.
- 2. Click on "Load Example Project" from CodeWarrior startup dialog. If the startup dialog is not shown, it may be opened from the CodeWarrior menu by clicking "File" and then "Startup Dialog...".
- 3. From example projects menu, open tree to select "HCS08>Evaluation Board Examples>DEMOQE128>DEMOQE128_LAP_Dictionary."
- 4. Create a new project name (ex. Lab2), set desired location and click "Create Project". This will open the project for the Low Power application for the DEMOQE128.
- 5. Launch "Terminal Utility" from the start menu (Programs>P&E DemoQE Toolkit>Utilities>Terminal Utility). *See DEMO9S08QE8 User Manual for details on the Terminal Utility.
- 6. Set port to USB COM.
- 7. Set Baud rate to 38400.
- 8. Turn board power switch to OFF position.
- 9. Board jumpers should all be set to the default settings shown in Quick Start Guide.
- 10. Turn board power switch to ON position and close debugger window.
- 11. Compile and program the MC9S08QE128 microcontroller with Low Power Application by clicking on "Debug" button, launching the Debugger.
- 12. From Connection Manager menu, select "DEMOQE on USB1" port and click on "Connect (Reset)."
- 13. From Erase and Program Flash menu, click on "Yes" to allow the debugger to mass erase the microcontroller's on-chip flash memory and program it with the new application.
- 14. Click on the "Start/Continue (F5)" button in debugger to run application.
- 15. Bring Terminal Utility to front and click the "Open Serial Port" button.

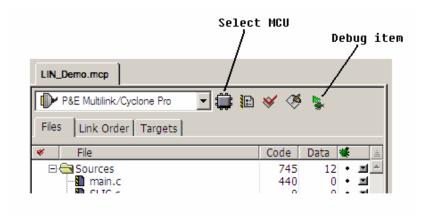


Figure.1 CodeWarrior interface

Running the Demo

If everything is configured correctly, the terminal window will display the following general message and the indictor '>' as soon as the MCU is running.

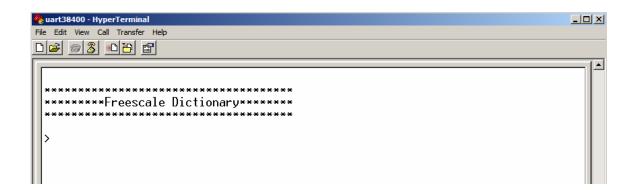


Figure.2 General message and indicator of the demo

Please input the word to be searched following the prompt, '>', and press ENTER to search the dictionary. If the word is found, the explanation is displayed on the terminal. If it is not found, the message, "<search word> is not found" is printed out.

For example: input adapt, then coming the explanation of adapt.

For another example: input addpt, then coming addpt: is not found.

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| Indicate the contract of adapting; composition recast into a new form; Ex. The play is a nadaption of a short novel. | >addpt: is not found | >adapt: not found | >a
```

Figure.3 Examples of successful dictionary lookup and unsuccessful lookup

Click on "Close Port" button and close Terminal Utility when finished.

Note:

If your CodeWarrior is a code-sized limited special edition version, please set #define LIMITED_VERSION 0 at the top of the main.c file and you will get a short dictionary.

If your CodeWarrior is not a code size limited version, please use macro #define LIMITED_VERSION 1 at the top of the main.c file and there will be more words in your dictionary.

Dictionary Entries:

The following entries are valid search words for the dictionary example:

Short Dictionary (for Special Edition License)

Special Edition License): accost, Bacchanalia, accoutre, Elysium, accretion, Epicurean, accrue, Machiavellian acerbity, Occident, acetic, Shangri-la, acidulous, abase, acknowledge,

accord,

adjoin, adjourn,

adjunct,

abase, acme, abase, acme, abate, acoustics, abdicate, acquiesce, aberrant, acquittal, aberration, acrid, abet, acrimonious,

abeyance, acrophobia, abhor, actuarial, abide, actuary, abject, actuate, abjure, acuity, ablution, acumen, abnegation, acute, abode, adage, abolish. adamant, abominable, adapt, addendum, abominate, aboriginal, addiction, abortive, addle, abrasive, address, abridge, adept, abrogate, adhere, abscission, adherent, abscond, adjacent,

abstemious, adjuration, abstinence, adjutant, admonish, abstract, abstruse, adore, abusive, adorn, abut, adroit, abysmal, adulation, abyss, adulterate, academic, advent,

accede, accelerate, accessible, accessory, acclaim, acclimate, acclivity, accolade, accommodate, accomplice,

absolute,

absolve, abstain,

Additional Entries for large

dictionary

altruistic, annihilate, amalgam, annotate. adventitious amalgamate, annuity, adversary, amass, annul, anodyne, adverse, amazon. ambidextrous, adversity, anoint, advert, ambience, anomalous, ambiguous, advocacy, anomaly, ambivalence, advocate, anonymity, aegis, amble, antagonism, aerie, ambrosia, antecede. aesthetic, ambulatory, antecedents, affable, ambush, antediluvian, affected. ameliorate. anthem. affidavit, amenable, anthology, affiliation, amend. anthropoid, affinity, amenities, anthropologist, affirmation, amiable, anthropomorphic, affliction, amicable, anticlimax, amiss, antidote, antipathy, amity,

altercation,

annex,

affluence, affront, afterlife, amnesia, antiquated, agape, antique, amnesty, agenda, amok. antiquity, agglomeration, amoral, antiseptic, antithesis, aggrandize, amorous, aggregate, amorphous, antler. aghast, amphibian, anvil, agility, amphitheater, apathy, agitate, ample, ape, amplify, aperture, agnostic, agog, amputate, apex, agrarian, amulet, aphasia, airy, anachronism, aphorism,

alacrity, analgesia. apiarist, alchemy, analgesic, apiary, alcove, analogous, apiculture, alias. analogy, aplomb, anarchist, alienate, apocalyptic, alimentary, anarchy, apocryphal, alimony, anathema, apogee, allay, ancestry, apolitical, allege, anchor, apologist,

allegiance, ancillary, apoplexy, allegory, anecdote, apostate, alleviate, anemia, apothecary, apothegm, alliteration. anesthetic. allocate, anguish, apotheosis, alloy, angular, appall, animadversion. allude, apparent,

allure, animated, apparition, alluvial, animosity, appease, alms, animus, appellation, aloft, annals, append, aloof, anneal, application,

apposite, askew, aver, appraise, asperity, averse, appreciate, aspersion, aversion. apprehend, aspirant, avert, apprehensive, aspire, aviary, apprise, assail, avid, approbation, assay, avocation, appropriate, assent, avow, appurtenances, assert, avuncular, apropos, assiduous, awe, aptitude, assimilate, awful, aquiline, assuage, awl, arable, assumption, awry, arbiter, assurance, axiom, arbitrary, asteroid, azure, arbitrate, astigmatism, babble. arboreal, astral, bacchanal. arboretum, astringent, bacchanalian, arcade, astronomical, backslide, arcane, astute, badger, arch-, asunder, badinage, archaeology, baffle, asylum, bait, archaic, asymmetric, archetype, atavism, baleful, balk. archipelago, atheistic. archives, atone, ballast, ardor, balm, atrocity, arduous. atrophy, balmy, argot, attentive, banal, aria, bandy, attenuate, arid, attest, bane, aristocracy, bank, attire, armada, attribute, bantering, aromatic, attrition, bar, arraign, atypical, barb, arrav. audacious. bard. audit. barefaced. arrears, arrhythmic, augment, bargain, arrogance, augury, baroque, arroyo, august, barrage, arsenal, aureole, barrister, artery, auroral, barterer. artful, auspicious, base, articulate, austere, bask, artifacts. authenticate. bastard, artifice, authoritarian, bastion, artisan, authoritative, bate, artless. autocratic. battalion. ascendancy, automaton, bauble, ascertain, autonomous, bawdy, ascetic. autopsy, bearing, ascribe, auxiliary, beatific, aseptic, avalanche, beatitude, ashen, avantgarde, bedizen, asinine, avarice, bedraggle, askance, avenge, beeline,

braid. befuddle, bitter. brand, beget, bivouac, begrudge, bizarre. brandish. beguile, blackball, bravado, behemoth, blanch, brave, beholden. bland. brawl. behoove, blandishment, brawn, belabor, blare, brawny, belated, blas'e, brazen, beleaguer, blasphemy, breach, belie, blatant, breadth, belittle, bleak, breed, brevity, bellicose, blemish, belligerent, blight, bridle, bemoan, blighted, brim. bemused, bliss, brindled, benediction, blithe, brink, benefactor, bloated, brisk, beneficent, blotch, bristle, beneficial, blowhard, bristling, beneficiary, bludgeon, brittle, benefit, blue, broach, benevolent, blues, brocade, benign, bluff, brochure, benison. blunder. broil. bent, blunt, bromide, bequeath, blurt, brooch, berate. blush. brood. bereaved, bluster, brook, bereavement, browbeat, bode, bereft. browse, bog, berserk, bogus, bruise, beseech, bohemian, brunt, brusque, beset, boisterous, besiege, bolster, buccaneer, besmirch. bolt. bucolic. bestial. bombardment. buffet. bestow. buffoon, bombast, betoken. bombastic. buffoonery, betray, bookish, bugaboo, betroth, boon, bulge, bevy, boor. bulk. beware, boorish, bullion, bewitch, boost, bully, bicameral, botch. bulwark, bicker, bouillon, bump, bid, bound, bungle, biennial. bountiful. buoyant, bifurcated, bourgeois, bureaucracy, bigot, bout, burgeon, bigotry, bovine. burlesque, bilious, bowdlerize, burnish, bilk, brackish, bust, buttress, billow, brag, billowing, braggadocio, buxom, biting, braggart, cabal,

cache, carrion, chancellor, cacophonous, cartographer, chant, cadaver. cascade. chaotic. cadaverous, chapel, caste, cadence, castigation, chaperon, chaplain, cadet. castrate, cajole, casual, char, calamity, casualty, charisma, calculated, cataclysm, charlatan, caldron, charm, catalyst, caliber, catapult, chary, calligraphy, cataract, chase, callous, catastrophe, chasm, callow, catcall, chassis, callus, catechism, chaste, calorific, categorical, chasten, calumny, cater, chastise, camaraderie, catharsis, chauvinist, cameo, cathartic, check, camp, catholic, checkered, cherubic, canard, caucus, candor, caulk(calk), chicanery, canine, causal, chide, chimerical, canker, caustic. canny, cauterize. chip. cant, cavalcade, chisel, cantankerous, cavalier, chivalrous, cantata. cavil. choice. choir, cede, canter, celerity, choleric, canto, canvass. celestial, chore, capacious, celibate, choreography, capacity, cemetery, chortle, capillary, censor, chorus. capitulate, censorious, chronic, caprice, censure. chronicle. capricious, centaur, chuckle. centigrade, churlish, capsize, caption, centrifugal, ciliated. captious, centrifuge, cipher, carafe, centripetal, circlet, carapace, centurion. circuit. carat(karat), cerebral, circuitous, circumlocution, carcinogenic, cerebration, cardinal, ceremonious. circumscribe, cardiologist, certitude, circumspect, careen, cessation, circumvent, career. cession. cistern. carefree, chafe, citadel, caricature, chaff, cite, carillon, chaffing, civil, carnage, chagrin, clairvoyant, chalice, carnal, clamber, carnivorous, chameleon, clamor, champion, carousal, clandestine, carping, championship, clangor,

clap, coma, clapper, comatose, clarion. combustible. clasp, comeback, claustrophobia, comely, clavicle, comestible, comeuppance, cleave, cleft, comity, clemency, commandeer, clich'e, commemorate, clientele, commemorative, climactic, commensurate, clime, commiserate, clip, commodious, clipper, commonplace, clique, commonwealth, cloister, communal, clot, commune, clout, compact, clown, compartment, cloying, compassion, compatible, coagulate, coalesce, compelling, compendium, coalition, coax. compensatory, coda, compilation, coddle, compile, codicil, complacency, codify, complaisant, coercion, complement, coeval, complementary, compliance, cog, cogent, compliant, cogitate, complicity, cognate, component, cognitive, comport, cognizance, compost, cohabit, composure, cohere. compound,

cohesion, cohorts,

coiffure,

coincidence,

collaborate,

colander.

collage,

collate.

collateral,

collation,

collected,

colloquial,

colloquy,

collusion,

colossal,

colossus,

coin,

comprehend,

compress,

comprise,

compromise,

compulsion,

compulsive,

compulsory,

concatenate,

compute,

concave,

concede,

conceit,

concentric,

conception,

concerted,

compunction,

comprehensive,

concession, conciliatory, concise, conclave, concoct, concomitant, concord, concordat, concurrent, concurrent, condescend, condign,